SOUTH ISLAND FOREST DISTRICT

West Coast

FOREST STEWARDSHIP PLAN

Background Information

Material accompanying the FSP but is not part of the FSP

Forest Operations
of

B.C. Timber Sales
Strait of Georgia Business Area

BCTS
BC Timber Sales
Strait of Georgia

106-06825/

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1 BACKGROUND INFORMATION

1.1 Introduction

Contained within the South Island Forest District (SIFD), is the Arrowsmith TSA – geographically fragmented, the total Allowable Annual Cut(AAC) is 402,166 m3, comprised of Replaceable Forest Licenses @ 302,382 m3 and Non-Replaceable Forest Licenses @ 99,784 m3. BC Timber Sales apportionment of the AAC is 148, 797 m3. This Forest Stewardship Plan (FSP) covers only a portion of the Arrowsmith TSA. Also included in this FSP are portions of Tree Farm Licence 54, under licence to International Forest Products Ltd.. BC Timber Sales (BCTS) worked together with the following Licensees within the TSA to develop a SIFD Forest Stewardship Plan (FSP):

- International Forest Products Limited
- Coulson Forest Products Limited
- Equis Forest Products Limited
- Echa-Peh Forest Resources Limited
- Weyerhaeuser Company Limited
- Steeves Forest Consulting Ltd.
- Western Forest Products Inc.

BCTS is providing a separate Forest Stewardship Plan to the Delegated Decision Maker for determination for approval.

The Timber Supply Area Group has collectively agreed to partner for the development of this FSP and in doing so will address higher-level issues identified previously through past planning processes. Spatially defining resource values is the key indicator in achieving results or strategies at the FSP level.

1.2 Rationale for Results or Strategies

1.2.1 Order Establishing Provincial Non-Spatial Old Growth Objectives (FSP s. 1.5.1.1)

Refer to:

http://srmwww.gov.bc.ca/rmd/oldgrowth/nonspatialold-growth.htm for the entire order[1] and FSP s.1.5.2.6) , Background for FPPR s. 9 and 9.1 Objectives set by government for wildlife and biodiversity – landscape level and stand level.

1.2.2 Vancouver Island Land Use Plan Higher Level Plan Order (FSP s. 1.5.1.2)

Many of the details on fulfilling objectives are based directly on what is specified in the Higher Level Plan order. Where there is opportunity for BCTS to specify details of how objectives will be met or a method to show an objective has been met, details are shown below:
BCTS and/or holders of Timber Sale Licences or Road Permit agreements entered into by BCTS are responsible only for the portions of the zones within the FSP.

SMZs or EFZs may not be entirely within the area of this FSP.

- **HLP Order Objective 1(a)**

Barkley Sound SMZ (SMZ 14)
The intent of the strategy for Objective 1(a) is to ensure at least one-third of the productive forest land base is available to meet Objective 1(a) of the VIHLP order.
The report entitled Resource Management Zones for Vancouver Island; Vancouver Island Resource Targets Project Interim Technical Report, dated April 1996, indicates that SMZ 14 has 13,630 hectares of productive forest, of which 10,053 hectares is occupied by mature and old forest.

Of the remaining mature and old forest, 4,543 hectares, (1/3 of 13,630) is required in order to meet the HLP order objectives with the remaining 5,510 hectares being available for harvest.

The harvesting that has taken place from 1996 to 2004 (inclusive) is described below by licensee

Weyerhaeuser (M&B)		105.7 hectares
BCTS (SBFEP)		176.1 hectares
Interfor		143.7 hectares
Echa-Peh		137.5 hectares
Equis		159.1 hectares
	Total	722.1 hectares

In addition to the above harvesting, non-replaceable FL A71504 has been issued over lands near Cataract Lake. Cutting permits covering 169.7 hectares have been issued under that license, which would allow to licensee to harvest the entire volume associated with it. Based on the above it is estimated that 4,618 hectares of mature and old forest is available for harvesting at the beginning of 2005. The harvesting of at most, 2,000 hectares over the term of the FSP would therefore not compromise government's ability to achieve Objective 1(a) of the Vancouver Island land Use Plan Higher Level Plan Order.

Alberni Canal SMZ (SMZ 18)

[1] http://srmwww.gov.bc.ca/rmd/oldgrowth/pdf/Old%20Growth%20Order%20May18th%20FINAL%2004%20.pdf

SMZ 18 is relatively small, with a forested land base of 3,128 hectares; 60% of which is located with TFL 44. At the end of 1995 the estimate of remaining mature forest with SMZ 18 was 887 hectares or 28% of the forested land base. Several "category A" openings within the SMZ appeared on Weyerhaeuser's FDP and it can be assumed that harvesting of old growth has taken place since 1995 within TFL 44. It is therefore likely that the mature forest component of the SMZ is very near or below the 25% threshold described in Objective 1(a).

The majority of the remaining mature and old forest is located outside TFL 44 along the western shores of the Alberni Inlet. Although this timber is heavily constrained by terrain, visual quality and wildlife features, some harvesting opportunities exist.

Limiting harvest to less that 200 hectares over the term of the plan is based on the following calculations (data based on the report entitled Resource Management Zones for Vancouver Island; Vancouver Island Resource Targets Project Interim Technical Report, dated April 1996)

Productive Forest Land base within SMZ 18	3,128 hectares
Assume 40% is located within the FDU 2	1,251 hectares
Pro Rated mature and old forest target in the FDU 2	
@one third Productive Forest Land Base	417 hectares
@one quarter Productive Forest Land Base	312 hectares
Estimate 50% of the SMZ within the FDU 2 is occupied by mature forest	625 hectares

By limiting harvesting to less than 200 hectares over the term of the plan, the contribution of the TSA lands toward meeting VIHLP Order Objective 1(a) should not be compromised.
Managing this target on a pro-rata basis between the TSA and TFL is an equitable way to share the impacts associated with this objective.

Nahmint SMZ (SMZ 13)
The report entitled Resource Management Zones for Vancouver Island; Vancouver Island Resource Targets Project Interim Technical Report, dated April 1996, indicates that SMZ 13 has 19,123 hectares of productive forest, of which 14,123 hectares or 74% was occupied by mature and old forest.

Weyerhaeuser's FDP for Alberni West (2001-2005) states that between 1996 and 2000, 131,134 m3 were harvested in the Nahmint SMZ. A maximum cut of 300,000 m3 would be allowed (75,000 m3/yr) between 2000 and 2004, for a total of 431,134 m3 between 1996 and 2004. The FDP also gives an average volume of 754 m^3/hectare. That would mean that less than 575 hectares would have been harvested to the end of 2004.

If this entire area were harvested, that would leave a total of (14,123-575=) 13,548 ha or 71% of the productive forest in mature and old.

Based on the large % of productive forest in mature and older in the Nahmint SMZ, harvesting less than or equal to 86 hectares of forest would not significantly change the percentage. The productive forest in mature and old would be greater than 1/3.

FDU 2 contains approximately 86 hectares of SMZ 13. This accounts for less than 0.5% of the productive forest land base of the Nahmint SMZ. Currently, 56 hectares of it is mature and old forest

For All SMZs:
The VIHLP Order states that mature seral forest targets for Objective 1(a) will be established through landscape unit planning. However, in the transition section of the VIHLP order, it is indicated that in the event that landscape units and objectives are not established in an area within 2 years of the date that the

order takes effect, the objective will be implemented in the area. Because more than 2 years has passed since the VIHLP Order took effect, Objective 1(a) must be implemented.

The VIHLP order states that 'mature seral forest is generally 80-120 years or older, depending on species and site conditions. The structure of mature seral forest generally includes canopies that vary vertically or horizontally, or both. The age and structure of the mature seral stage will vary significantly by forest type and from one biogeoclimatic zone to another'. For this Forest Stewardship Plan, we have chosen to use the actual age of the forest to determine how much area must be left to maintain mature seral targets. At the present time, the age classification is the best information available for the entire area within the SMZs. However, once Terrestrial Ecosystem Mapping (TEM) is available for all SMZs, an analysis may be undertaken so that stands with the structural stage equivalent to stands equal to 80 -120 years in age will be spatially defined to meet the mid/old seral target. Spatial designation of mature seral forest may also be undertaken through means other than TEM.

For this FSP, maintaining the mature plus old seral target area within each SMZ is not an issue. There is either sufficient mature plus old seral forest or other factors limiting the amount of harvest available in the SMZ.

➢ HLP Order Objective 1(b)

Structural forest attributes and elements will be retained through adherence to some sections in the FPPR, including:

- wildlife tree retention areas within cutblocks. Sections 66 and 67 of the FPPR set out the requirements for wildlife tree retention areas.
- Coarse woody debris (CWD) retention; Section 68 of the FPPR sets out the requirement for coarse woody debris retention.

In addition

- CWD & wildlife trees will be enhanced at the stand level by including these structural forest attributes in streamside reserves, basal area (BA) retention in riparian management zones (RMZs), wildlife tree patches (WTPs) and in partial cut harvesting systems
- Some riparian management area (RMA) retention as well as other cutblock retention will be non-contiguous within cutblock boundaries and distributed throughout cutblocks.

These elements will be used by qualified professionals in development of site plans.

The stated strategy provides stand diversity within cutblocks. The limitations placed on cutblock size and silvicultural systems within SMZs will assist in providing horizontal diversity within future stands.

➢ HLP Order Objective 1(c)

Silvicultural systems can be characterized by the level of retention. Silvicultural systems that will be applied across the SMZ will be specified at the site plan level. However, each opening will have some level of retention. The degree of retention will be determined by site characteristics, and the values that are present in the area when developing site plans for the cutblocks.

The areas within the SMZs are largely classified as Natural Disturbance Type (NDT) 1. The objective in this disturbance type is to maintain a range of small to large (up to 250 ha) similarly aged forest stands

on the landscape. There will be a distribution of cutblocks of varying sizes that will be incorporated into a variety of patch sizes (areas with a similar age (generally within a 20-year range)).

The spatial distribution of dispersed or other forms of variable retention areas may be varied to take advantage of natural structural diversity and achieve the 50% forest influence required to meet retention system objectives as defined in the FPPR.

Differences in site conditions between cutblocks - such as the size of riparian and stream buffer areas and buffers for windthrow management -are expected to dictate a variety of retention patch sizes. Site conditions such as topography, windthrow, visual, wildlife constraints and harvest system will also dictate differences in retention patch shapes

One method that BCTS may use to show that a variety of silviculturalsystems have been applied across the SMZ is to produce a ledger of cutblocks showing silvicultural system.

A patch size analysis may be conducted for the area under the FSP, which includes the Alberni Canal, and Barkley SMZs. It could provide guidance for the FSP and direction for meeting the distribution of the natural disturbance patterns as described in the Landscape Unit Planning Guide (LUPG). In the LUPG, a patch is defined as a stand of similar aged forest that differs in age from adjacent patches by more than 20 years. For analysis purposes, patch size recommendations would apply to new harvesting or disturbed area 20 years or younger, as denoted by the relevant forest cover inventory label. To complete the analysis, areas may be grouped into units based on Natural Disturbance Types (NDT) and like biogeoclimatic zones.

➢ HLP Order Objective 2

Salvage of damaged timber may require exceeding the cutblock size described in Objective 1(c). The size of cutblocks associated with salvage will be determined by:

- the extent of damaged timber;
- the financial viability of recovering the damaged timber;
- present and potential fire hazard, and
- the impact of the associated forest values.

When safe, practicable and site conditions permit, structural characteristics of natural disturbance will be incorporated into the cutblock.

If cutblocks larger than 5 or 40 ha, as the case may be, are harvested to recover damaged timber, this information will be recorded in the site plan.

➢ HLP Objective 4

Less than 0.5% of the Nahmint SMZ (SMZ 13) is within FDU 2. Objective 4 applies to the entire SMZ and therefore implementation on the small land base covered by this FDU is not feasible. Until landscape unit plans (LUP) are complete for the areas covering the Nahmint SMZ, any rare or underrepresented site series where harvesting takes place will be represented within a WTP or other reserve. It is presumed that the LUP will address this objective within the Nahmint. When that plan is complete, harvesting activities will be consistent with the LUP.

FENs are in place in SMZ 13 (on TFL 44 outside of the area in this FSP)until such time as a Landscape Unit Plan is complete and will also contribute to achieving the results of these objectives.

Results and strategies outlined under Objective 1 contribute to achieving the results in Objective 4.

➢ HLP Objective 5

Less than 0.5% of the Nahmint SMZ (13) is within the FDU 2. The variability of patch size in which the elements and attributes are contained is meant to be measured across the SMZ. As a result there is no need to apply these criteria to a very small portion of the SMZ.

Results and strategies outlined under Objective 1 contribute to achieving the results in these objectives.

➢ HLP Objective 6

Background for this section is as in the Forest Stewardship Plan section on Visual Quality.

➢ HLP Objective 7

For the Effingham and Maggie Enhanced Forestry Zones (EFZs), the Landscape Unit Planning process has been undertaken. Existing draft OGMAs as shown on the FSP map will assist in protecting specific identified resource values such as wildlife, and biodiversity values.

Other measures to assist in protecting these resource values include:

- Incorporating important or key wildlife, biodiversity, fish, scenic, recreation and cultural values into the cutblocks.
- Completing or re-assessing key Coastal Watershed Assessment Procedure (CWAP) indicators to identify resource values to protect, to assist in evaluating potential results of harvesting cutblocks over 40 hectares.

The size of the opening will be limited through the following considerations:

- The extent of economically operable timber;
- Operational efficiency;
- Scenic values identified in a visual landscape inventory;
- The presence of known recreational features;
- The presence of known wildlife features, and draft or established wildlife habitat areas (WHAs);
- Opportunity for inclusion of habitat for species at risk identified in the "Notice – Indicators of the Amount, Distribution and attributes required for the survival of species at risk in South Island Forest District";
- Proposed, draft and established OGMAs.

➢ HLP Objective 8

The Effingham River watershed was identified as having significant fisheries values in the District Manager's letter of October 30, 2000. It is designated as a Fisheries Sensitive Watershed in Forest Planning and Practices Regulation (FPPR) Schedule 2, s 8.1.

In watersheds where the District Manager determines that there are significant fisheries values and significant watershed sensitivity, licensees will avoid adverse hydrological impacts, which may result from the practices referred to in objective 7 by:

- Engaging the services of a hydrologist and/or a forestry professional to assemble recommendations on forestry practices in the watershed;
- Having a forestry professional assess the recommendations made and implement them in a way to avoid adverse effects to the watershed.

Cutblocks will only be harvested if the risk of incurring adverse hydrological impacts is moderate or lower.

The following is for guidance only, unless there are specific results/strategies listed within the FSP:
Based on the advice of a hydrologist and/or forestry professional, the following are practices that may be considered to mitigate impacts and maintain watershed integrity:

- Prescribing silvicultural practices, such as prompt planting, and planting large stock, where required;
- Reducing potential for sediment to directly enter the streams through debris management and erosion control plans in road building.

Based on the advice of a hydrologist and/or forestry professional, one or more of the following assessments may be considered for identification of current or possible future impacts:

- detailed gully and terrain assessments;
- stream classification for cutblocks;
- watershed assessments;
- channel assessments;
- surface soil erosion hazard assessments.

➢ HLP Order Objective 9 and 9.1

For the Effingham and Maggie EFZs, to increase the short-term availability of timber, the VILUP HLP Order allows for the selection of a single species when proposing species composition following harvest. Species selection will be based on site specific conditions as determined at the site planning stage.

BCTS will propose to plant more than one species in each cutblock harvested.

1.2.3 Wildlife (FSP s. 1.5.2.2)

The following provides further information and rationale regarding Objective set by government for wildlife.

In the opinion of BCTS, the primary focus of the FPPR Section 7 Objectives set by government is to manage and conserve wildlife as per the Notices provided by government for species at risk and ungulate winter ranges.

(a) Are the results or strategies Section 7(1)(a) measurable and verifiable?

Queen Charlotte Goshawk *Accipiter gentilis laingi*

- The result/strategy is measurable. The measure is against the portion of the 1% THLB impact allotted in the Notice Indicators of the Amount, Distribution and Attributes of Wildlife Habitat of Species At Risk in the South Island Forest District and Material Supporting the Notice, but not Part of the Notice, Information Concerning Wildlife Habitat For The Survival Of Species At Risk In The South Island Forest District.
- When the result/strategy meets the amount indicated in the Notice, management of this species will step down to Section 70 (2) practices, the location and THLB impact will be described as part Section 86 (3)(b) Annual Reports.
- The result/strategy is verifiable. For the case of a Wildlife Habitat Area, the spatial delineation is maintained by government as part of the Order that legally establishes the WHA.

Marbled Murrelet *Brachyramphus marmoratus*

- The result/strategy is measurable. The measure is against the portion of the 1% THLB impact allotted in the Notice Indicators of the Amount, Distribution and Attributes of Wildlife Habitat of Species At Risk in the South Island Forest District and Material Supporting the Notice, but not Part of the Notice, Information Concerning Wildlife Habitat For The Survival Of Species At Risk In The South Island Forest District.
- Area of harvest of age class 8 and 9 will summarized annually and measured against the area of age class 8 and 9 as of 2002.
- In the case where nesting habitat has been spatially defined, the amount of habitat class 1, 2 and 3 will be documented at the landscape level to determine the level of draw down.
- The result/strategy is verifiable. For the case of a Wildlife Habitat Area, the spatial delineation is maintained government as part of the Order that legally establishes the WHA.
- In the case that nesting habitat has been spatially defined any draw down will be measured annually to measure actual draw down against predicted draw down.

Scouler's Corydalis *Corydalis scouleri*

- This species is present in the Walbran, Nitinat and Caycuse Landscape Units. No result or strategy is required in this FSP.

More information on these species at risk may be found in the publication:

Interfor and the government of BC. 2003. A field guide to species at risk in the coast forest region of British Columbia. BC Gov't publication services. 151 pp.

Other considerations:

- Other identified wildlife species that have not been indicated in the notices will be given consideration for management under FPPR Section 70(2) practices, the location and THLB impact will be described as part of FPPR Section 86(3)(b) Annual Reports.
- Section 7(1)(b): No regionally important wildlife species have been identified in an Order as per Section 7(2)(a).
- Section 7(1)(c): Ungulate winter ranges have been spatially established for the area of the plan. No Notices have been provided as per Section 7(2)(b).

- Incidentally Retained Forest (IRF)

  There is retained forest area that is beyond the scope of LU Planning;

  - IRF is a term that describes forest retained incidental to the planning process;
  - IRF is forest - old growth, sensitive terrain, riparian, wetlands, low site forest, inoperable, etc.;
  - IRF augments connectivity, increases patch sizes, reduces edge effect and contributes to forest interior conditions;
  - IRF is constrained in some manner whereby it is highly unlikely that it will be impacted by future harvesting activities; and
  - IRF has biological, ecological and habitat values that contribute to achieving old growth and biodiversity management objectives.

1.2.4 Water, Fish, Wildlife and Biodiversity within Riparian Areas (FSP s. 1.5.2.3)

In developing the "water, fish, wildlife and biodiversity within riparian areas" result/strategy for FPPR s. 8 the following two perspectives were considered:

(a) Are the results or strategies in the "water, fish, wildlife and biodiversity within riparian areas" objective measurable and verifiable?

- If defaults specified in the FPPR ss.47 to 52 for riparian widths are accepted by BCTS, the riparian widths are measurable and verifiable against the defaults specified in the FPPR ss.47 to 52 for riparian widths

- If defaults specified in the FPPR ss.47 to 52 are not considered to be a good management strategy, an assessment based on ecological rationale is prepared as a basis for operating outside the default (see Figure 1). The presence of ecological rationale for operating outside of the defaults specified in the FPPR ss.47 to 52 is measurable and verifiable.

- By tracking variances from riparian area specified in the FPPR ss.47 to 52 defaults at the cutblock level, BCTS has record of such areas. These riparian widths/areas can be measured and verified against those specified within the ecological rationale.

- The ecological rationale addresses criterion specified in the FPPR riparian factors. The degree of which the FPPR riparian factors are addressed within the ecological rationale are measurable and verifiable.

(b) Are the results and strategies consistent with the "water, fish, wildlife and biodiversity within riparian areas" objective set by government?

- The result/strategy is consistent with the "water, fish, wildlife and biodiversity within riparian areas" objective set by government by ensuring all riparian factors are addressed in the ecological rationale

Ecological Rationale will address the following factors:

1. *relative need to buffer the aquatic ecosystem of a stream, wetland or lake from the introduction of materials that are deleterious to water quality or fish habitat, (the relative importance and sensitivity of different riparian classes of streams, wetlands, and lakes in conserving water quality, fish habitat, wildlife habitat and biodiversity);*

2. *the role played by trees and understory vegetation (see Figures 2 and 3);*

3. *the need to maintain stream bank and stream channel integrity;*

4. *the role of forest shading in controlling an increase in temperature within a temperature sensitive stream, if the increase might have a deleterious effect on fish or fish habitat;*

5. *the type, timing or intensity of forest practices that can be carried out within the context of a management regime referred to in factors 1 to 4.*

The following are examples for guidance only, unless there is specific result/strategy listed within the FSP:

Examples of situations where defaults may be deemed to be ineffective (which may require increasing or decreasing a specific riparian reserve area) to meet criteria set out in the factors:

1. High windthrow potential estimated to cause (See Figures 4 and 5)

   - *introduction of materials that are deleterious to water quality or fish habitat,*
   - *destabilization of stream bank and stream channel integrity*

2. Harvesting techniques in second growth stands will improve riparian biodiversity and stream condition:

   - *Fewer, larger trees will act better to maintain stream bank and stream channel integrity (factor 3)*
   - *Forest Health*

3. Patch openings that mimic natural disturbance dynamics help form greater biodiversity and habitat niches (factor 2)

4. High capacity or sensitive streams

The following is for guidance only, unless there is specific result/strategy listed within the FSP:

Relative need for riparian reserves may be compared between different classes of stream, lake, or wetland.

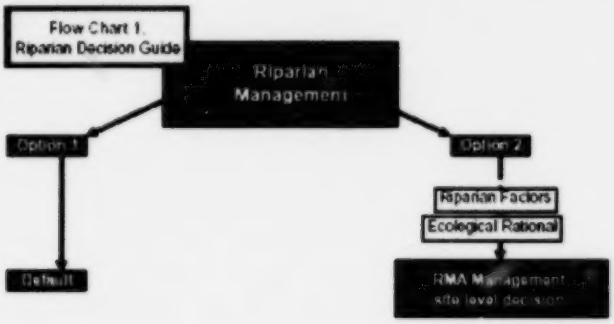
Ecological Rationale components that BCTS may consider when addressing the riparian factors include (but are not be limited to):

- Stream Capacity (Factor 1), i.e. level of use, fry density, spawner density.
- Species at risk (Factor 2)
- Geomorphic sensitivity indicators (Factors 1 and 3), e.g. Lacustrine (L)/glaciolacustrine (L^G), Marine (W) or glaciomarine (W^G), Fluvial ($sF) or glaciofluvial ($cF^G$) with silty to clayey texture, Till (sM) with silty to clayey texture ($cM), Eolian (E), and Organic (O).
- Environmental Sensitivity e.g. Es1 and Es2, slopes >60%, or Terrain Classes IV and V
- Windthrow hazard and consequence (Factors 1 and 3)
- Connectivity (Factor 2)
- Logging history (Factor 5)
- Level of planned harvest (Factor 5)
- Forest/Riparian Health (Factors 2 and 3)

With consideration to the clause *"without unduly reducing the supply of timber from British Columbia's forests"* BCTS (based on ecological rationale) may seek to take advantage of overlap with other important attributes to maintain a watershed or landscape level budget (no net change in riparian reserve area) equivalent to the default criterion specified in the FPPR ss.47 to 52 for riparian widths including but not limited to:

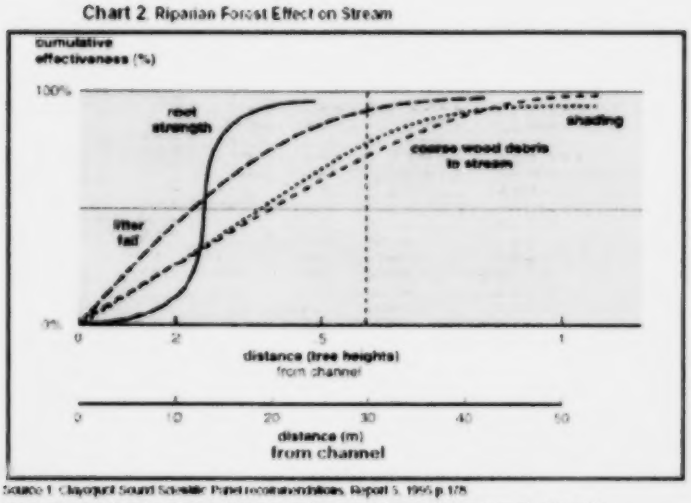
- Stand level biodiversity
- Landscape level biodiversity
- Wildlife habitat features
- Regionally important wildlife and ungulate species

Figure 1. Riparian Decision Guide



Note: the planning charts are for guidance only unless specified within the FSP

Figure 2. Riparian Forest Effect on Stream

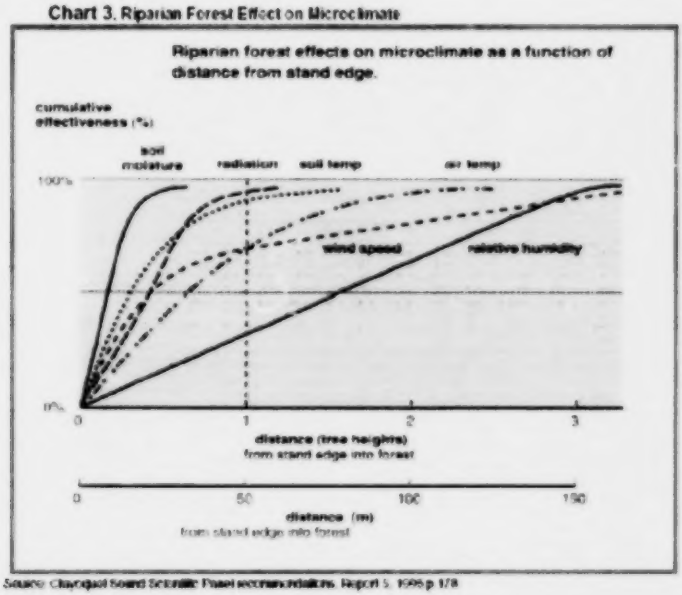


Source 1: Clayoquot Sound Scientific Panel recommendations, Report 5, 1995 p 178

Source 2: Riparian Areas: Functions and Strategies for Management, National Research Council, 2003 p 168

Note: the planning charts are for guidance only unless specified within the FSP

Figure 3. Riparian Forest Effect on Microclimate



Source: Clayoquot Sound Scientific Panel recommendations. Report 5. 1996 p 178

Note: the planning charts are for guidance only unless specified within the FSP

Figure 4. – Windthrow Decision Guide (part 1)

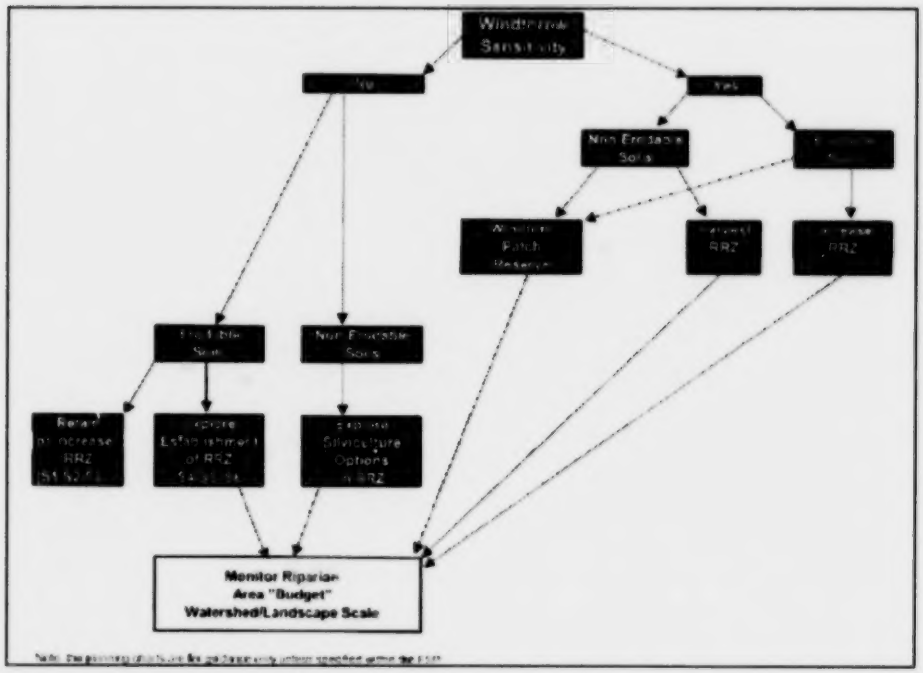
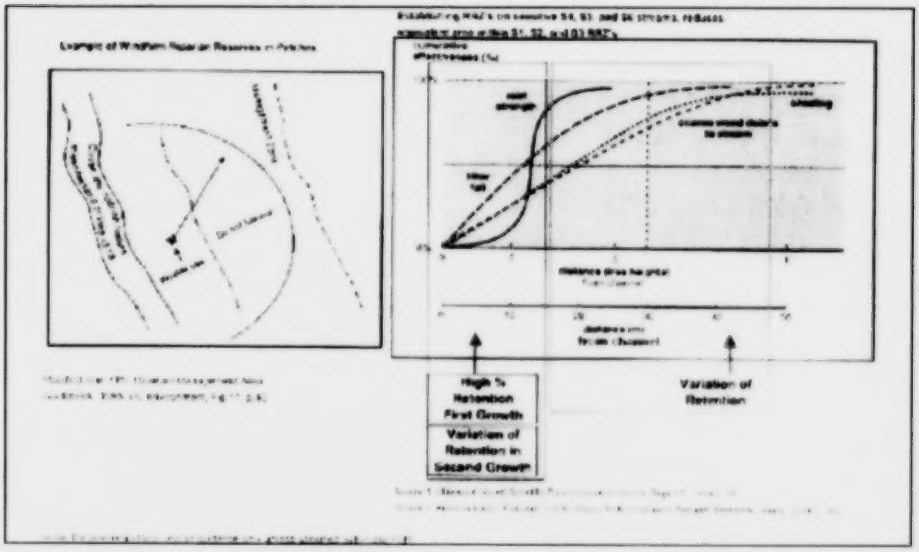


Figure 5. Windthrow Decision Guide (part 2)



1.2.5 Fisheries Sensitive Watersheds (FSP S. 1.5.2.4)

In developing the "fisheries sensitive watersheds" result/strategy for FPPR S. 8.1 the following three perspectives were considered:

(a) Are the results or strategies in the "fisheries sensitive watersheds" objective measurable and verifiable?

- The environmental indicators are measured by BCTS in concert with other FSP holders within the FDU containing a fisheries sensitive watershed (*who* is measuring) and are listed as Equivalent Clearcut Area (ECA), road density and mass wasting potential (*what* is measured) as defined by the 1999 Coastal Watershed Assessment Procedure Guidebook (CWAP), which is measurable and verifiable.

- The environmental indicators are derived from Geographic Information System (GIS) map information. The information is primarily area, lengths, and elevation; which are measurable and verifiable.

- Calculation methodology for environmental indicator risk are those specified in the 1999 Coastal Watershed Assessment Procedure Guidebook (CWAP), which is measurable and verifiable

- Fisheries sensitive watersheds are consistent with those supplied by government (where measurements are to take place).

(b) Are the results and strategies consistent with the "fisheries sensitive watersheds" objective set by government as it pertains to cumulative hydrological effects?

- The results/strategies are consistent with the "fisheries sensitive watersheds" objective set by government by monitoring key environmental indicators listed the 1999 Coastal Watershed Assessment Procedure Guidebook (CWAP) to prevent material adverse impact on fish habitat.

(c) Is the objective consistent with the timber harvesting rights granted by government?

- The "fisheries sensitive watersheds" result/strategy is consistent with the 1999 Coastal Watershed Assessment Procedure Guidebook (CWAP), which was not seen to unduly reduce the supply of timber from British Columbia forests.

1.2.6 Community Watersheds (FSP S. 1.5.2.5)

In developing the "Community Watersheds" result/strategy (R/S) for FPPR S. 8.2 the following three perspectives were considered:

(a) Are the results or strategies in the "Community Watersheds" objective measurable and verifiable?

- The environmental indicators are measured by BCTS in concert with other FSP holders within the FDU containing a community watershed (who is measuring) and are listed as ECA, road density and mass wasting potential (what is measured) as defined by the 1999 Coastal Watershed Assessment Procedure Guidebook (CWAP), which is measurable and verifiable

- The environmental indicators are derived from GIS information. The information is primarily area, lengths, and elevation; which are measurable and verifiable.

- Calculation methodology for environmental indicator risk are those specified in the 1999 Coastal Watershed Assessment Procedure Guidebook (CWAP), which is measurable and verifiable

- Community watersheds are consistent with those supplied by government (where measurements are to take place).

(b) Are the results and strategies consistent with the "Community Watersheds" objective set by government as it pertains to cumulative hydrological effects?

- The results/strategies are consistent with the "Community Watersheds" objective set by government by monitoring key environmental indicators listed the 1999 Coastal Watershed Assessment Procedure Guidebook (CWAP) to prevent material adverse impact on fish habitat

(c) Is the objective consistent with the timber harvesting rights granted by government?

- The "Community Watersheds" results/strategies are consistent with the 1999 Coastal Watershed Assessment Procedure Guidebook (CWAP), which was not seen to unduly reduce the supply of timber from British Columbia 's forests.

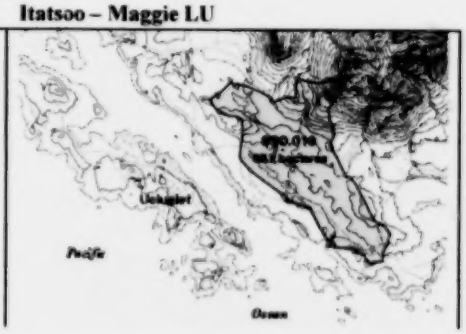
Table 1: Registered Community Water Licenses

Watershed	Area Identifier	Area of Concern	FDU	LU
Haggard Lake	930.009	18 ha	2	Henderson
Itatsoo	930.010	552 ha	5	Maggie
Mack	930.012	62 ha	4	Toquart
Mercantile	930.016	1,143 ha	5	Maggie

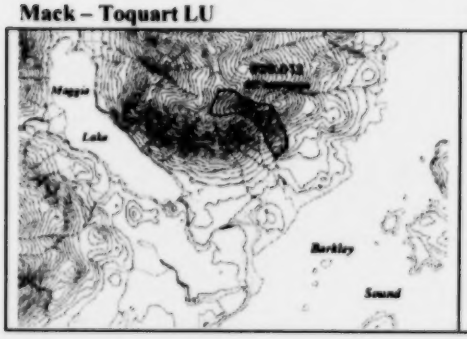
Figure 6. Registered Community Water Licences

Haggard Lake - Henderson LU

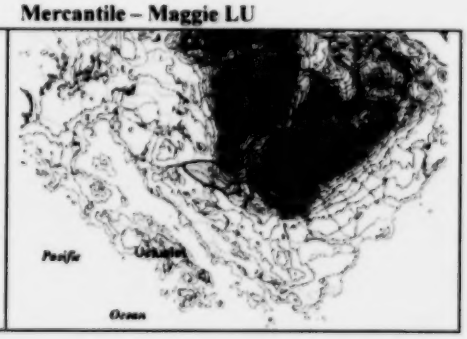
Itatsoo – Maggie LU



Mack – Toquart LU



Mercantile – Maggie LU



1.2.7 Wildlife and Biodiversity - Landscape Level and Stand Level (FSP S. 1.5.2.6)

In developing the wildlife and biodiversity result/strategy (R/S) for FPPR S. 9 and 9.1 the following three perspectives were considered:

(a) Are the results or strategies in the wildlife and biodiversity objective measurable and verifiable?

- Non-spatial old-growth retention level is set by the Order Establishing Provincial Non-Spatial Old Growth Objectives (the Order). The amount of area available for harvesting and required for old growth retention is based the government's aspatial database (Regional Land Use Plan (RLUP) database version 2, March 13, 2002) or analysis based on updated inventories.

- To ensure harvesting maintains old-growth to the levels defined by the Order BCTS will report its harvesting activities consistent with FPPR S. 86 and also report old-growth retention/conservation.

- BCTS in concert with other FSP holders in an FDU will track the harvesting of old growth within each BEC variant at a 1:20,000 scale.

- Wildlife Tree Retention values may be determined using several different methods. The methods are described later in this section under "stand level planning".

- To ensure wildlife tree retention levels are maintained, retention levels will be reported annually consistent with FPPR S. 86.

- The result/strategy is measurable and verifiable as both Old Growth Management Areas (OGMAs) and Wildlife Tree Retention (WTR) will be spatially delineated and mapped. The amount of non-spatial old growth can be verified through analysis of updated forest cover inventory.

(b) Are the results and strategies consistent with the wildlife and biodiversity objective set by government?

- The R/S described are consistent with maintaining wildlife and biodiversity values as stated in the objective. To determine if the result/strategy can be consistent with the objective to implement without unduly reducing the supply of timber and to the extent practicable, BCTS must monitor with respect to the carrying out strategies or achieving the results specified to determine if implementation unduly reduces the THLB.

(c) Is the objective consistent with the timber harvesting rights granted by the government?

- The R/S described are consistent timber harvesting rights.

Rationale with respect to old-growth management and wildlife tree retention:

Management for old-growth and wildlife tree retention occurs at two distinct scales; landscape level and stand level respectively.

➢ Wildlife and Biodiversity – Landscape level planning (FPPR S. 9)

The objective set by government for biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape (FPPR S. 9).

Planning for the delineation of old-growth management areas occurs at the landscape level. Planning for old-growth occurs in the following circumstances:

- where the Order Establishing Provincial Non-Spatial Old-Growth Objectives has been issued by Government and where no Landscape Unit Plan exists;
- where Draft Old-Growth Management Areas have been identified and considered by Minister of Sustainable Resource Management to meet the intent of the Order; or
- where there is an approved/legally established Landscape Unit Plan.

1) The Order Establishing Provincial Non-Spatial Old-Growth Objectives establishes biodiversity emphasis (BE), old-growth objectives specific to each landscape unit as well as clarifying the amount of area available for timber harvesting. As per the preamble of the Order, this order supplements, but does not replace, FPPR S. 9.

Where the Order Establishing Provincial Non-Spatial Old-Growth Objectives has been issued by Government and where no Landscape Unit Plan exists, BCTS will implement the non-spatial old-growth objectives in consideration of the Implementation Policy developed by Ministry of Sustainable Resource Management (MSRM) to support the Order.

The non-spatial order expresses a target percentage for old growth retention in the biogeoclimatic (BEC) variant and consequently clarifies the amount of area available for timber harvesting. Refer to the FSP for old growth available for harvest. As these numbers were generated from the RLUP database, they represent the best available information, and these tables may be recalculated to reflect inventory updates.

The RLUP database is calculated based on forest cover information for the whole LU. However, the whole LU may not be included in an FDU (reference FSP S 1.5.1.1.). As such RLUP numbers for some FDUs may be an overestimate of the amount of old growth available for harvest. As such it is important that BCTS review and agree in writing to the apportionment and maximum old growth available for harvesting per BEC variant during the term of the FSP.

The majority of values generated for RLUP were derived from two different scales; 1:250,000 BEC and 1:20,000 forest cover. The resolution of the area available for harvest has been rounded to the nearest 10 ha in the FSP to acknowledge the lack of precision inherent in these numbers. The numbers generated by RLUP should be used as guide and recalculated as inventories are updated.

Table 2: Old Growth Area Available in High and Intermediate BE

FDU – BE – Lead FSP Holder	BEC Variant	Productive Forest ha	OG Target ha (%)	Total Area in OG (NC+THLB)	OG Area available for harvest
		A	B	C	D
3 - L - IFP	CWH vh1	2,202	286 (13)	346	60
	CWH vm1	10,989	1,429 (13)	4,659	3,230
	CWH vm2	2,578	335 (13)	1,739	1,404
	MH mm1	25	5 (19)	24	20
2 - H - IFP	CWH vm1	10344	1965 (19)	4287	2322
	CWH vm2	5444	1034 (9)	2956	1921
	CWH xm2	48	6 (13)	4	-3
	MH mm1	1439	403 (28)	676	274
4 - I - Coulson	CWH vh1	1,316	171 (13)	798	627
	CWH vm1	7,441	967 (13)	5,495	4,528
	CWH vm2	2,220	289 (13)	1,792	1,504
	MH mm1	99	13 (19)	99	80

Table 3: Old Growth Area Available in Low BE

FDU – Lead FSP Holder	BEC Variant	Productive Forest	OG Target ha (%)	2/3 drawdown	Total Area in OG (NC+THLB)	OG Area available for harvest (DD 2/3)*
		A	B	C	D	E
1 - BCTS	CWH vh1	2,976	387 (13)	128	836	449 (708)
	CWH vm1	614	80 (13)	26	47	-33 (21)
2 - IFP	CWH vm1	19,519	2,538 (13)	838	6,855	4,318 (6,017)
	CWH vm2	4,831	628 (13)	207	2,024	1,396 (1,817)
	MH mm1	278	53 (19)	17	115	62 (98)
5 - BCTS	CWH vh1	413	531 (13)	175	1,949	1,418 (1,774)
	CWH vm1	12,460	895 (13)	295	1,597	701 (1,302)
	CWH vm2	4,759	31 (13)	10	44	13 (34)
6 - IFP	CWH vh1	3,756	488 (13)	161	2,080	1,592 (1,919)
	CWH vm1	6,672	867 (13)	286	3,010	2,143 (2,724)
	CWH vm2	3,086	401 (13)	132	2,351	1,950 (2,219)
	MH mm1	119	23 (19)	7	116	94 (109)

* DD 2/3 shows the number of ha available for harvest if the maximum draw down value of 2/3 is applied (as per provision A5 in the Order).

For BEC variants where:

1. the amount of old growth planned for harvest surpasses the amount of old growth available for harvest:

   - as per columns D or E in the above tables, or
   - from tables that have been re-run to reflect an inventory update,

2. the amount of old growth available for harvest is expressed as less than or equal to zero.

BCTS will not enter into agreements for Timber Sale Licences or Road Permits to harvest the relevant old growth in the indicated BEC variant except to the extent that younger forests are identified in accordance to Provision A5 (low BE's) or A6 (high or intermediate BE's) of the Order. These areas will:

- Follow the relevant procedures in the Landscape Unit Planning Guide; and;
- Will not be proposed for harvest until the old growth management areas are advanced for consideration and approval as draft OGMAs (as per provision A8 of the Order) or as part of an approved/legally established Landscape Unit plan.

2) Where Draft Old-Growth Management Areas have been identified and considered by Minister of Sustainable Resource Management to meet the intent of the Order, the R/S for the Order no longer applies. Planning for OGMAs has advanced to the point where the OGMA boundaries for priority BEC variants are substantially complete (for all or a portion of the landscape unit) and the draft OGMAs have been identified under provision A8 to meet or exceed the intent of the Order.

For the purposes of landscape unit planning for old growth retention, emphasis will be placed on achieving targets from non-contributing old growth first; non-contributing or partially contributing mature and early mature forest second; and then encroachment on the THLB will be considered.

- The emphasis is to capture retained area primarily within the non-contributing land-base. If that cannot be achieved, then delineation may encroach on the THLB.
- Landscape units contain varying amounts of younger (<250 years) forested habitat provided by existing processes from which to build on for ecosystem management. In addition, Wildlife Habitat Areas that are established in the future may improve upon ecosystem integrity. Other practices, such as the establishment of riparian reserve zones, also improve connectivity.
- An important part of the OGMA planning exercise is to ensure that these separate processes complement each other. For example, OGMAs are placed within or adjacent to areas that are highly constrained from harvesting to increase patch size. These larger patches allow greater opportunity to improve connectivity between adjacent patches.

- The intent is to maintain a series of old forest habitat patches across probable movement corridors to allow wildlife dispersal and gene flow. Some species are particularly susceptible to mortality in winter and connecting or aggregating OGMAs may help facilitate movement. Stand level biodiversity measures together with landscape level OGMA and Incidentally Retained Forest are a precautionary approach to management of biodiversity and ecological values.

- OGMAs should be selected based on a review of stand attributes in an effort to maximize their value from a biodiversity standpoint while minimizing timber supply impact. An approach guided strictly by age class or Allowable Annual Cut (AAC) contributions could result in the inclusion of stands of marginal biodiversity value and significant timber supply impact.

- Effort should be extended to reduce the impact on the timber supply by combining areas in the non-contributing with areas within the timber harvesting land base. Where feasible, forested stands within and adjacent to high value wildlife habitat will be captured as OGMA in order to include old growth representation with a specific wildlife habitat requirement.

- In addition to including areas with specific habitat requirements, other factors, such as patch size, distribution and connectivity were considered during OGMA delineation. Specific efforts should be made to ensure OGMAs were distributed throughout the LU and not concentrated in a particular drainage or mapsheet.

- Although connectivity is not an objective in priority biodiversity planning (see Landscape Unit Planning Guide), it should be considered when delineating OGMAs. As higher elevation areas are largely old growth and often inaccessible, connectivity opportunities from lower to higher elevations may only exist in a few areas due to the contiguous lower elevation disturbance history. With the inclusion of the younger aged stands in the non-contributing, such as with riparian reserve zones and Incidentally Retained Forest, the connectivity between lower and higher elevation OGMAs increases.

- To mitigate potential impacts on the timber supply, engineers should identify areas with harvest opportunity, both now and distant future. The area beyond what is identified as physically harvestable may be combined with the non-contributing land base, and used first to satisfy old growth targets.

- As a rule OGMAs should be delineated to be contiguous with OGMAs in adjacent BEC units. This approach significantly increases the biological value of the plan by increasing OGMA patch size, connectivity and distribution over the Landscape Unit.

- Due to the naturally fragmented nature of most landscapes at higher elevations, opportunities to recruit larger patches to provide for forest interior conditions may be favoured over smaller patches.

3) Where an approved/legally established Landscape Unit Plan is in place, the R/S for the Order no longer applies.

- Landscape unit plans should have been developed to the extent practicable to achieve the objective to implement without unduly reducing the supply of timber.

- If a land use objective conflicts with a requirement of FPPR S. 69 (General Wildlife Measure) or FPPR S. 70(2) (Forest activity that does not damage a wildlife habitat feature), a designated official must exempt a person from the requirement to the extent of the conflict as per FPPR S. 92.1(1) and S. 92.1(2).

➢ Wildlife and Biodiversity – Stand level planning (FPPR S. 9.1)

The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees (FPPR S. 9.1).

Subject to FSP S. 1.5.2.6, BCTS will ensure that any Timber Sale Licence or road permit entered into will comply with FPPR S. 66, except that:

1. Wildlife tree retention values for specific BEC subzones in the landscape unit will be consistent with those specified in the Regional Land Use Plan database (version 2, March 13, 2002) where "LUs are considered to have been designated", or

2. Conduct spatial wildlife tree retention analysis and wildlife tree retention values. The already-constrained area (as determined by buffering the non-contributing land base) within 250m of a cutblock may be used towards meeting the wildlife tree retention target.

Spatial wildlife tree retention analysis will demonstrate the spatial distribution of the Incidentally Retained Forest (IRF). Spatial analysis will buffer that IRF land-base to demonstrate how much operable land-base is more than 250-metres away from already constrained area. The analysis and resulting mapping will spatially identify zones that will not require wildlife tree retention.

1.2.8 Visual Quality (FSP S. 1.5.2.7)

(a) How is the result/strategy consistent with the objective set by government?

This strategy is consistent with the objectives set by government in that it:

- BCTS will ensure that any Timber Sale Licence or Road Permit entered into in Known Scenic Areas will be consistent with the objective;

- Considers Visual Landscape Inventory updates since October 24, 2002 and

- Considers mutually agreed amendments and revisions to the Visual Landscape Inventory that was established on or before October 24, 2002

(b) How does the result/strategy meet the definition of measurable and verifiable (i.e. 4 W's test: who, what, when, where)?

This strategy meets the definition of measurable and verifiable in that it:

- outlines that Timber Sale Licences and road permits entered into by BCTS will apply the strategy;

- outlines that road construction and timber harvesting activities undertaken by Timber Sale Licences and road permits entered into by BCTS are subject to the strategy;

- outlines that the strategy applies within the scenic areas as established on November 13, 1998.

(c) Other

Scenic areas were made known in the South Island Forest District by letters dated November 13, 1998. No objectives were established at that time.

To manage in accordance with the recommended Visual Sensitivity Class (VSC), BCTS will take into consideration the following when defining appropriate levels of landscape alteration:

➢ Description of VSC

1 Very high sensitivity to human-made visual alteration. The area is extremely important to viewers. There is a very high probability that the public would be concerned if the Visual sensitivity Unit was visually altered in any way or to any scale.

2 High sensitivity to human-made visual alteration. The area is very important to viewers. There is a high probability that the public would be concerned if the Visual Sensitivity Unit was visually altered.

3 Moderate sensitivity to human-made visual alteration. The area is important to viewers. There is a probability that the public would be concerned if the Visual Sensitivity Unit was visually altered.

4 Low sensitivity to human-made visual alteration. The area is moderately important to viewers. There is a risk that the public would be concerned if the Visual Sensitivity Unit was visually altered.

5 Very low sensitivity to human-made visual alteration. The area may be somewhat important to viewers. There is a small risk that the public would be concerned if the Visual Sensitivity Unit was visually altered.

➢ Description of rVQC

- Preservation (P) — No visible human-caused alterations
- Retention (R) — Human-caused alterations are visible, but not evident
- Partial Retention (PR) — Human-caused alterations are evident but subordinate and therefore not dominant

- Modification (M) — Human-caused alterations are dominant but have natural appearing characteristics
- Maximum Modification (MM) — Human-caused alterations are dominant and out of scale

BCTS will consider inventory (Visual Sensitivity Class (VSC)) or analysis (rVQC) functions, as per the August 25, 1997 Forest Practices Branch letter to all Regions

Where the information exists in the approved Visual Landscape Inventories (VLI's), BCTS may also consider Viewer Rating (VR), Viewing Condition (VC), Biophysical Rating (BR), Visual Absorption Capability (VAC) and Existing Visual Condition (EVC).

Evaluation of the viewer's experience will consider the VSC or rVQC, the visual design of the proposed operation, and the scale of the proposed operation. These variables are described in the Visual Impact Assessment Guidebook (April 1995).

The broad experience of the viewer from important viewpoints will be considered. Evaluation of the experience will be in perspective view, and will not focus on harvest blocks or tenure boundaries. Also, viewer experience may be evaluated distinct and separate from the impact of views of private land, logging dumps and dryland sorts, and permanent alterations such as towns, and resorts.

1.2.9 Cultural Heritage Resources (FSP s. 1.5.2.8)

(a) References to other results/strategies in the plan, commitments made, and actions taken

Actions taken under this strategy will rely heavily on commitments made and actions taken under other parts of this FSP.

Actions taken consistent with the objective for cultural heritage resources have a profound relationship to the objectives set by government for soils, timber, wildlife, visuals, riparian, and biodiversity, etc. and the commitments made and actions taken under those objectives.

There is a strong relationship between the focus of the objective set for cultural heritage resources and those set for other resources. Results and strategies specified for objectives in other sections of the FSP will assist in conserving, or if necessary, protecting potential cultural heritage resources that are the focus of a traditional use by an aboriginal people, of continuing importance to that people, and not regulated under the *Heritage Conservation Act*. Some examples follow:

Potential Cultural Heritage Resource	Other FSP Objectives relating to the resource
Hunting and Wildlife	Vancouver Island Higher Level Plan Order objectives VILUP HLP order; Order establishing Provincial Non-Spatial Old Growth Objectives Soils Wildlife Wildlife and Biodiversity Water, Fish, Wildlife and Biodiversity within Riparian Areas

Potential Cultural Heritage Resource	Other FSP Objectives relating to the resource
Fishing	◷ Soils ◷ Wildlife ◷ Wildlife and Biodiversity ◷ Water, Fish, Wildlife and Biodiversity within Riparian Areas ◷ Fisheries Sensitive Watersheds
Food Gathering	◷ Soils ◷ Wildlife ◷ Wildlife and Biodiversity ◷ Water, Fish, Wildlife and Biodiversity within Riparian Areas
Plant Materials	◷ Vancouver Island Higher Level Plan Order objectives VILUP HLP order; ◷ Order establishing Provincial Non-Spatial Old Growth Objectives ◷ Soils ◷ Wildlife ◷ Wildlife and Biodiversity ◷ Water, Fish, Wildlife and Biodiversity within Riparian Areas
Conservation of Cedar for Bark	◷ Vancouver Island Higher Level Plan Order objectives VILUP HLP order; ◷ Order establishing Provincial Non-Spatial Old Growth Objectives ◷ Soils ◷ Wildlife ◷ Wildlife and Biodiversity ◷ Water, Fish, Wildlife and Biodiversity within Riparian Areas ◷ Stocking standards
Conservation of Cedar Cultural Logs	◷ Vancouver Island Higher Level Plan Order objectives VILUP HLP order; ◷ Order establishing Provincial Non-Spatial Old Growth Objectives ◷ Soils ◷ Wildlife ◷ Wildlife and Biodiversity ◷ Water, Fish, Wildlife and Biodiversity within Riparian Areas Stocking standards

(b) How is the result/strategy consistent with the objective set by government?

This strategy is consistent with the objectives set by government in that it:

- Commits that Timber Sale Licences and road permits entered into will be consistent with the objective;

- Focuses on conservation or protection of cultural heritage resources that meet the definition, are threatened by activities authorized by BCTS, are not otherwise conserved or protected, and are capable of being addressed in the context of the FSP;
- Outlines a strategy for addressing potential cultural heritage resources that are discovered after the approval of the FSP;
- Considers the 5 factors in FPPR Schedule 1 Section 4; and
- Commits to communication about potential cultural heritage resources with the Ministry of Forests – Operations Division.

(c) How does the result/strategy meet the definition of measurable and verifiable (i.e. 4 W's test: who, what, when, where)?

This strategy meets the definition of measurable and verifiable in that it:

- outlines that the strategy applies to BCTS;
- relates the actions taken holders of agreements with BCTS to road construction and timber harvesting;
- describes a strategy addressing cultural heritage resources that are identified in the past (consultation with First Nations prior to Review and Comment), in the present (comments made by First Nations in accordance with FPPR S. 21), and in the future (process to deal with potential cultural heritage resources); and
- outlines that actions taken under the strategy are limited to the area of asserted traditional territory within an FDU.

1.2.10 Recreation

There are two (2) known and recognized recreational site/trails within the bounds of the Forest Development Units (FDUs) contained in the South Island Forest District (SIFD) FSP. It is also recognized there is no legal objective set to date (under the FPPR, Section 14(2)). BCTS is aware of the sites and will ensure that any agreements entered into for harvesting or road-building will require the integrity of these two sites be maintained. These sites are known as the Toquart recreation site and the Kennedy Flats (Ucluelet) Interpretive trail (A walk in the Forest!).

The recreation sites are shown on the FSP map. Also attached are Exhibit A maps showing the boundarie s of the recreation sites.

1.2.11 Stocking Standards (FSP s. 2)

(a) Is the result/strategy consistent with the objective set by government?

FPPR s. 29(2) states:

If the Timber Sales Manager

a) has authorized the harvesting of timber under a timber sale licence that requires its holder to prepare a forest stewardship plan, or

b) Is the holder of a forest stewardship plan,

He or she must establish in accordance with the plan, the prescribed requirements and the standards, a free growing stand on those portions of the area of the harvest under the plan that are in the net area to be reforested.

FPPR S. 44(1) [Free Growing Stands Generally] states:

A person who has an obligation to establish a free growing stand must establish, for areas that have been identified under section 16(1)[stocking standards] as areas to which this section will apply, a stand that

(a) *meets the applicable stocking standards set out in the forest stewardship plan for the area, by the applicable regeneration date specified for the area, and*

(b) *meets the applicable stocking standards and free growing height set out in the forest stewardship plan for the area by a date that is no more than 20 years from the commencement date, unless the minister permits a later date.*

FPPR S. 16 [Stocking Standards] states:

(1.) A person required to prepare a forest stewardship plan must ensure that the plan specifies the situations or circumstances that determine when section 44(1) [free growing stands generally] or section 45 [free growing stands collectively across cutblocks] will apply to an area.

(2.) In specifying a stocking standard under this section, a person who prepares a Forest Stewardship Plan may consider the factors set out in section 6 [factors relating to stocking standards] of Schedule 1.

(3.) A person required to prepare a Forest Stewardship Plan must ensure that the plan specifies, for each of the situations or circumstances specified under subsection (1) where

(a) *Section 44(1)(a) will apply, the regeneration date and stocking standards,*

(b) *Section 44(1)(b) will apply, the free growing height and stocking standards,*

(c) *Section 45(1) will apply, the regeneration date and the stocking standards, and*

(d) *Section 45(2) will apply, the free growing date and the stocking standards, as approved by the chief forester.*

(4.) A person required to prepare a Forest Stewardship Plan must ensure that the plan specifies stocking standards for areas referred to in section 44(4), and the situations or circumstances that determine when the stocking standards will be applied

The stocking standards for this Forest Stewardship plan are listed in FSP S. 2 and have been adopted from previously approved stocking standards and from the Coast/Vancouver Region's Stocking Standard guidelines.

As no late free-growing date is specified, FPPR S. 44(1)(b) applies for late Free Growing Dates. FPPR S. 16(3)(c) and (d) do not apply to this FSP. The criteria outlined in the FSP for stocking standards will be the results. The standards meet the relevant requirements of the Forest and Range Practices Act and Forest Planning and Practices Regulations.

1.2.12 Measures to Prevent the Introduction and Spread of Invasive Plants (FSP S. 1.7)

Control Strategy for Moderate to High Risk Invasive Plants: Revegetate by grass seeding soil exposed by forestry related activities (> 0.1ha) within two years after the forestry related activities are completed if it is reasonably foreseeable that revegetation would materially reduce the likelihood of moderate to high risk invasive plant germination.

The following is for guidance only in consideration of the potential spread of invasive plants unless there is a specific result/strategy listed within the FSP:

Prevention Through Education

- Distribution of high to moderate risk invasive plant information to employees and contractors of BCTS

Prevention Through Brushing and Weeding

- Target moderate to high risk invasive plant species during regular brushing and weeding

Table 4: Invasive Plant Species Specified

INVASIVE PLANT REGULATION Section 2, Invasive Plant Species Specified		BCTS Interpretation			
Species (Common)	Species (Latin)	Found in FDU	Threat to Forest Resources	Comments	Control Strategy
Anchusa (common Buglos)	Anchusa officinalis	No	Nil	Found on roadsides, dry fields, pastures, and disturbed areas. Invades pastures and hay lands where competing vegetation is sparse. Spread by animal ingestion, wind, vehicles, animal and human feet, redistribution of soils and gravels, and contaminated hay bales.	N/A
Baby's breath	Gypsophila paniculata	Yes	Low	Baby's Breath is observed in a wide variety of habitats. Small infestations occur along roadsides, in ditches and vacant lots. Larger infestations are known in pastures and rangeland areas. Most aggressive in areas of low rainfall. Although it will grow in fine textured soils, this soil type retards it root development. Baby's breath depends on stored food reserves in the roots for perennial regrowth, therefore prefers courser soils where extensive root systems are better able to develop. Baby's Breath is invasive on sub-marginal farm or grazing land. When it escapes cultivation it out-competes native and introduced perennial grasses. Baby's breath infested hay contains reduced crude protein content. It is considered unsightly on vacant lots and along fencelines. Used as a garden ornamental and extensively in the floral	N/A

				industry for bouquets.	
Black knapweed	Centaurea nigra	No	Nil	Can infest disturbed rangelands and reduce forage. Spread by infected hay and vehicle undercarriages.	N/A
Blueweed	Echium vulgare	No	Nil	Can invade rangelands and pastures. Seeds stick to clothing, animal fur, and feathers. Grows in dry roadsides, disturbed habitats and rocky pastures.	N/A
Brown knapweed	Centaurea jacea	No	Nil	Information unavailable	N/A
Bull Thistle	Cirsium vulgare	Yes	Low	Invades disturbed areas: roadsides, logged forest land, pastures, and barnyards. Common in low to mid elevations in settled areas, primarily in agricultural areas. Heavy infestations can exclude livestock	N/A

Species (Common)	Species (Latin)	Found in FDU	Threat to Forest Resources	Comments	ControlStrategy
Canada Thistle	*Cirsium arvense*	Yes	Low	Invades disturbed areas: roadsides, river banks, pastures, and barnyards. Common in low to mid elevations in settled areas, primarily in agricultural areas. Somewhat shade intolerant.	N/A
Common Burdock	*Arctium minus*	Yes	Low	Invades disturbed areas: roadsides, ditches, streambanks, pastures, and barnyards. Common in low elevations in settled areas. Burr like seeds are readily dispersed by attaching to animal fur and clothing.	N/A
Common Tansy	*Tanacetum vulgare*	Yes	Low	Invades disturbed areas, stream banks, and fields and meadows where is competes aggressively (especially under grazing pressure).	N/A
Dalmatian Toadflax	*Linaria dalmatica*	No	Nil	Invades disturbed areas (fields, roadsides, gardens, waste places). Common at low to middle elevations in settled area in the southern half of our region. Is similar to Blue Toadflax which is native	N/A
Diffuse Knapweed	*Centaurea diffusa*	Yes	Low	Chokes out desirable forage for livestock and wildlife and increases soil erosion. Does not tolerate excess moisture well.	N/A
Field Scabious	*Knautia arvensis*	No	Nil	Found on roadsides, pastures, and fields. Competes with forage species and native pastures. Capable of invading undisturbed plant-communities. Once established, it is difficult to eradicate. Sometimes planted as an ornamental and to attract butterflies.	N/A
Giant Knotweed	*Polygonum sachalinense*	No	Nil	Similar to Himalayan and Japanese Knotweed, but larger. Low elevation species that establishes in disturbed areas (especially around human settlements). Will grow in a variety of habitats but is most frequently found adjacent to streams, creeks, roads, in vacant lots or in rights of ways. It is frequently found in areas that are considered moist to wet.	N/A

Species (Common)	Species (Latin)	Found in FDU	Threat to Forest Resources	Comments	Control Strategy
Gorse	*Ulex europaeus*	Yes	Moderate	Invades open, often disturbed sites (along roads, agricultural sites). Low elevation usually near the ocean in drier areas. Can form impenetrable thickets. Fairly flammable (creates increased fire risk). Southeast portion of Vancouver Island. Water is a common dispersal agent (with many populations near the ocean), as well as animals, birds, and machinery.	Revegetate by grass seeding soil exposed by forestry related activities (> 0.01ha contiguous area) within two years after the forestry related activities are completed if it is reasonably foreseeable that revegetation would materially reduce the likelihood of moderate to high risk invasive plant germination.
Hoary Alyssum	*Berteroa incana*	No	Nil	Most common in sandy and high gravel content soils. Establishes in dry disturbed habitats, such as roadsides. Tends to increase in forage crops following drought or winter kill. Horses consuming this plan may be troubled with fever, limb edema, and laminitis.	N/A
Hoary Cress	*Cardaria draba*	No	Nil	Highly competitive weed with native vegetation on rangelands	N/A
Hound's tongue	*Cynoglossum officinale*	No	Nil	Found on dry sites of pastures, roadsides, and logged forest land. Decreases forage on rangeland and pastures. Barbed seeds cling to animal hair	N/A
Japanese Knotweed	*Polygonum cuspidatum*	No	Nil	Similar to Himalayan and Giant Knotweed, but smaller. Low elevation species that establishes in disturbed areas (especially around human settlements). Japanese Knotweed prefers open habitats and does poorly in the under-story of forested areas. It grows in a variety of soil types along roadsides, edges of waterways, neglected gardens and unused areas. It is known to grow in climates experiencing high temperatures and drought. Wetlands and moist, low-lying areas are the most common habitats. Dense stands, capable of crowding out all other vegetation, degrade native plant communities. It spreads quickly, is extremely aggressive and persistent and able to survive severe flooding. It poses a significant threat to areas adjacent to rivers, streams and other shore-lines where it can cause bank erosion. When growing near water, root fragments can be carried down stream to establish new colonies. Escapees from deserted gardens are not uncommon.	N/A

Species (Common)	Species (Latin)	Found in FDU	Threat to Forest Resources	Comments	Control Strategy
Leafy spurge	Euphorbia esula	No	Nil	Grows in low to mid-elevations, dry roadsides, fields, grasslands, open forests, and disturbed habitats. Invades rangeland and reduces its productivity by producing a compound that actively inhibits growth of other plants.	N/A
Marsh Thistle	Cirsium palustre	Yes	Moderate	Well adapted to moist to wet openings, including pastures, bog and fen communities, logged areas and roadsides. Invades moist fields and rangelands, and meadows, where it replaces desirable forage plants for wildlife and livestock. Can form dense populations that can compete tree seedlings planted for reforestation	Revegetate by grass seeding soil exposed by forestry related activities (> 0.01ha contiguous) within two years after the forestry related activities are completed if it is reasonably foreseeable that revegetation would materially reduce the likelihood of moderate to high risk invasive plant germination.
Meadow Hawkweed	Hieracium pilosella	No	Nil	Information not available	N/A
Meadow Knapweed	Centaurea pratensis	Yes	Low	Invades rangelands and pastures and can reduce yields in hay fields. Also infests roadsides and disturbed areas where it forms dense stands and hinder regrowth of desirable native species	N/A
Nodding Thistle	Carduus nutans	No	Nil	Found along dry roadsides and disturbed habitat. Dispersed by wind, water, wildlife, and livestock.	N/A
Orange Hawkweed	Hieracium aurantiacum	Yes	Low	Invades fairly dry open forest and meadows, and disturbed areas (roadsides, gravel pits, clearings, pastures, highway transportation corridors). Mostly South east side of Vancouver Island. Seed spread thought to be primarily by recreationists, pack animals, and hay. Although seeds are plumed, they are not widely dispersed by wind. Rapid spread is cause for concern.	N/A

Species (Common)	Species (Latin)	Found in FDU	Threat to Forest Resources	Comments	Control Strategy
Oxeye Daisy	*Chrysanthemum leucanthemum*	Yes	Low	Invades disturbed areas, and fields and meadows where is competes aggressively (especially under grazing pressure). Occurs in low to mid-elevations in grasslands, and dry to moist forests. Reduces forage for livestock and wildlife because of its disagreeable taste. Spreads by seed and creeping underground stems.	N/A
Perennial pepperweed	*Lepedium latifolium*	No	Nil	Invades dry openings and disturbed sites at low to middle elevations. May be found on beaches, riverbanks, tidal shores, marshy floodplains and valley bottoms, and seasonally wet areas. Prolific seed producer. Seeds dispersed short distances by wind and water. Aggressively colonizes riverbank habitat	N/A
Plumeless Thistle	*Carduus acanthoides*	No	Nil	One of the most aggressive thistles due to its high seed production. Grows in pastures, fields, disturbed habitats, logged areas, and roadsides at mid elevations. Seeds are dispersed primarily by wind	N/A
Puncture vine	*Tribulus terrestris*	No	Nil	Occurs in the dry grasslands of the interior. Also grows along roads, beaches, pastures, dry fields and disturbed habitats. Dispersal is by tiny burr like seeds that attach to animals, clothing, or the tires of vehicles.	N/A
Purple Loosestrife	*Lythrum salicaria*	Yes	High	Eurasian species, known as the "beautiful killer" as it effectively displaces native wetland species. Invades Marshes, wet meadows, estuaries, streambanks, lake-shores, wet ditches, at low elevations. Can form dense stands that out compete native vegetation resulting in reduction of plant and animal diversity in wetland and stream ecosystems.	Revegetate by grass seeding soil exposed by forestry related activities (> 0.01ha contiguous area) within two years after the forestry related activities are completed if it is reasonably foreseeable that revegetation would materially reduce the likelihood of moderate to high risk invasive plant germination.
Rush Skeletonweed	*Chondrilla juncea*	No	Nil	Grows in dry grassland zones. Occupies rangelands, roadsides and disturbed habitats at mid-elevations. Dispersed by wind, water, animals, and humans	N/A
Russian Knapweed	*Acroptilon repens*	No	Nil	Occurs east of the Coast-Cascade mountains in low to mid-elevation grasslands, forests, pastures, and riverbanks. Major problem for agriculture sector	N/A

Species (Common)	Species (Latin)	Found in FDU	Threat to Forest Resources	Comments	Control Strategy
Scentless Chamomile	*Matricaria maritima*	Yes	Low	European species established on roadsides and other disturbed areas sporadically throughout our region. Particularly on compacted soils. Low to mid elevation. Can form near monocultures around ponds, streams, and other frequently flooded areas. Germinates in flood conditions, seeds float on water. First infestations often found around watercourses.	N/A
Scotch broom	*Cytisus scoparius*	Yes	Moderate	Open sites, especially on disturbed sites (roadsides, gravel pits, clearings, pastures, highway transportation corridors, hydro and pipelines). Also invades natural meadows and open forest at low elevation. Is a specific risk to the regions "rainshadow flora". Flammable, increases fire hazard. Effective seed for germination	Revegetate by grass seeding soil exposed by forestry related activities (> 0.01ha contiguous area) within two years after the forestry related activities are completed if it is reasonably foreseeable that revegetation would materially reduce the likelihood of moderate to high risk invasive plant germination.
Scotch Thistle	*Onopordum acanthium*	No	Nil	Found in low elevations along roadsides, ditches, rangelands, and disturbed areas. Can be competitive with native forage plants. Often successful in moist areas such as riverbanks. Seeds disperse mainly on the wind, but also in hay, water, and by attaching to fur and clothing	N/A
Spotted Knapweed	*Centaurea maculosa*	Yes	Low	Widespread in low to midelevation grasslands and dry open forests. Shade intolerant. Seed is spread widely by infected hay and vehicle undercarriage.	N/A
St. John's-wort	*Hypericum perforatum*	Yes	Low	Invades moist open sites (meadows, streambanks) and disturbed areas. Low to high elevation. Scattered and common throughout our region. It is a Eurasian perennial weed, and is a serious pest in fields, pastures, and on roadsides and waste areas.	N/A

Species (Common)	Species (Latin)	Found in FDU	Threat to Forest Resources	Comments	Control Strategy
Sulphur Cinquefoil	*Potentilla recta*	No	Nil	Mostly restricted to grasslands and dry forest zones. Major concern in agricultural areas.	N/A
Tansy ragwort	*Senecio jacobaea*	Yes	Low	Invades disturbed sites, logged over areas, roadsides, clearing, at low to middle elevations. Common on Vancouver Island, but not found in mainland coast areas north of Bute Inlet and south of Kitimat/Skeena. Seeds are dispersed by wind, water, and animals	N/A
Teasel	*Dipsacus fullonum*	No	Nil	Perennial, reproducing only by seed. Very prickly. Grows in waste areas, meadows, roadsides, and sometimes in cultivated land. Usually in moist areas on coarse soils	N/A
Yellow Iris	*Iris pseudacorus*	No	Nil	Found in wetlands in southern BC and Washington. Invades open areas like grassy meadows, fields, pastures, roadsides and logged areas, and open woodland. Low to moderate elevation.	N/A
Yellow starthistle	*Centaurea solstitialis*	No	Nil	Well established in the Pacific Northwest and appears to be spreading. Best adapted to dry sites, mid to high-elevation. Shade intolerant	N/A
Yellow toadflax	*Linaria vulgaris*	No	Nil	Invades fields, roadsides, gardens and waste places. Common in mid elevations in settled areas of the southern half of our region. Abundant on disturbed sites and roadsides mostly in drier parts. Mostly found from the northern extent of the Strait of Georgia and south. Spreads by creeping root systems, and wind-borne seeds.	N/A

1.3 List of Legal Objectives (Documents)

1.3.1 Order Establishing Provincial Non-Spatial Old Growth Objectives

Refer to: http://srmwww.gov.bc.ca/rmd/oldgrowth/nonspatial-old-growth.htm for the entire order[2].

[2] http://srmwww.gov.bc.ca/rmd/oldgrowth/pdf/Old%20Growth%20Order%20May%18th%202004%20FINAL%2004%20.pdf

Order Establishing Provincial Non-Spatial Old Growth Objectives

Order

I. Pursuant to section 4(1) of the *Forest Practices Code of British Columbia Act* (Act), the landscape units listed in Appendix 1, Table 1 are established as landscape units.

II. Pursuant to section 4(2) of the Act, part A of this Order establishes landscape unit objectives for the landscape units listed in Appendix 1, Table 1.

III. This Order does not apply to land contained within a woodlot licence, an area contained in a community forest agreement that is less than (40) hectares, or to areas defined as the 'trust area' as per the *Islands Trust Act* with the exception of Gambier and Anvil Island.

A. Biodiversity emphasis and old growth objectives

1. **Biodiversity emphasis for landscape units**

   For the purpose of implementing objective 2 below, biodiversity emphasis is assigned as listed in Appendix 1, Table 1

2. **Old growth objectives**

   To contribute to the conservation of biodiversity, licensees[1] must maintain old forest by biogeoclimatic variant[2] within each landscape unit according to the age of old forest and the percentage of old forest retention that is specified in Tables 1 through 4 and the assignment of Natural Disturbance Types outlined in Appendix 3, and subject to provisions 5 through 9 below.

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[1] In this Order, "licensee" refers to a party required to prepare a forest development plan under the *Forest Practices Code of British Columbia Act* or a forest stewardship plan under the *Forest and Range Practices Act* with the exception of any agreement holder mentioned in III above.

[2] As approved by the Regional Director of MSRM, see the attached Implementation Policy.

Table 1. Natural Disturbance Type One

Biogeoclimatic Zone	Age of Old Forest	Percent Old Forest Retention in Low Biodiversity Emphasis	Percent Old Forest Retention in Intermediate Biodiversity Emphasis	Percent Old Forest Retention in High Biodiversity Emphasis
CWH*	>250yrs	>13	>13	>19
ICH	>250yrs	>13	>13	>19
ESSF	>250yrs	>19	>19	>28
MH	>250yrs	>19	>19	>28

* Some portions of the CWH have a unique type of disturbance. Those portions of the CWHvm1, CWHvm2, CWHwh1, and CWHwh2 where wind event occurs, should be considered as NDT4.

Table 2. Natural Disturbance Type Two

Biogeoclimatic Zone	Age of Old Forest	Percent Old Forest Retention in Low Biodiversity Emphasis	Percent Old Forest Retention in Intermediate Biodiversity Emphasis	Percent Old Forest Retention in High Biodiversity Emphasis
CWH	>250yrs	>9	>9	>13
CDF	>250yrs	>9	>9	>13
ICH	>250yrs	>9	>9	>13
SBS	>250yrs	>9	>9	>13
ESSF	>250yrs	>9	>9	>13
SWB	>250yrs	>9	>9	>13

Table 3. Natural Disturbance Type Three

Biogeoclimatic Zone	Age of Old Forest	Percent Old Forest Retention in Low Biodiversity Emphasis	Percent Old Forest Retention in Intermediate Biodiversity Emphasis	Percent Old Forest Retention in High Biodiversity Emphasis
BWBS[b]	>100yrs	>13	>13	>19
SBPS	>140yrs	>7	>7	>10
BWBS[c]	>140yrs	>11	>11	>16
SBS	>140yrs	>11	>11	>16
MS	>140yrs	>14	>14	>21
ESSF	>140yrs	>14	>14	>21
ICH	>140yrs	>14	>14	>21
CWH[d]	>140yrs	>11	>11	>16

b BWBS with deciduous prominence

c BWBS w thin mixture prominence

d CWH subject to regular extensive wind driven disturbance. See notes under XIII. 1 tables for a listing of variants

Table 4. Natural Disturbance Type Four

Biogeoclimatic Zone	Age of Old Forest	Percent Old Forest Retention in Low Biodiversity Emphasis	Percent Old Forest Retention in Intermediate Biodiversity Emphasis	Percent Old Forest Retention in High Biodiversity Emphasis
ICH	>250 yrs	>13	>13	>19
IDF	>250 yrs	>13	>13	>19
PP	>250 yrs	>13	>13	>19

3. Old growth objectives for the Okanagan area

To contribute to the conservation of biodiversity in the Okanagan area[f] licensees must maintain old forest by biogeoclimatic variant within each landscape unit to the amount specified in Appendix 2, Table 1 (Okanagan Old Forest Retention Table), subject to provisions 6-8 below.

4. Old growth objectives for the Merritt area

To contribute to the conservation of biodiversity in the Merritt area[g] licensees must maintain old forest by biogeoclimatic variant within each landscape unit to the amount specified in Appendix 2, Table 2 (Merritt Old Forest Retention Table), subject to provisions 6-8 below.

[f] See Appendix 1 Map 7 Okanagan Timber Supply Area

[g] See Appendix 1 Map 8 Merritt Timber Supply Area

5. Potential reduction in old forest retention in low biodiversity emphasis areas

For landscape units with a low biodiversity emphasis, the old forest retention percent listed in Tables 1-4 may be reduced by up to 2/3, to the extent necessary to address impacts on timber supply.[5]

6. Use of younger forests to meet old forest objectives

In intermediate and high emphasis landscape units where it can be demonstrated that equal or better conservation benefits would result, stands less than the age of old, and preferably mature forest, may contribute to the percentage of old forest retention defined in Tables 1-4.[6]

In the Okanagan and Merritt areas where it can be demonstrated that equal or better conservation benefits would result, younger stands and preferably mature forest, can be used to meet the area requirements listed in Tables 1 and 2, Appendix 2.

7. Recruitment and catastrophic natural disturbances

In landscape units where there is:

a. An immediate recruitment situation due to insufficient old forest in a variant; or

b. An epidemic or catastrophic natural event such as wildfire or insects

A recruitment strategy approved by the Minister of Sustainable Resource Management or his delegate[7] can be used to meet the requirements of Objective 2, 3 and 4.[8]

8. Draft old growth management areas

Where the Minister of Sustainable Resource Management, his delegate, or a licensee or group of licensees has identified draft old growth management areas, the Minister or delegate may specify in writing that these draft old growth management areas meet the intent of this Order[9].

9. Pilot project regulation areas

For the area encompassed by the Fort St John, Riverside and Stillwater pilot project regulations, the Minister of Sustainable Resource Management or his delegate may specify in writing the sections of the approved Sustainable Forest Management Plan[10], or other approved operational plan as required under the pilot regulation which meets the intent of this Order.

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[5] See Implementation Policy for further guidance on reductions in percent retention in low biodiversity emphasis areas.
[6] See Implementation Policy for further technical information regarding the use of younger stands.
[7] Delegate is defined in the delegation memo from the Minister of SRM to regional directors. July 2002 Reference: 29048, and as will be amended from time to time.
[8] See Implementation Policy for guidance on recruitment.
[9] This requires that the draft old growth management areas are retained or managed for old forest values.
[10] Approved is defined in section 39 of the Fort St John Pilot Project regulation.

BRITISH COLUMBIA

VANCOUVER 2010

January 24, 2005

File: 17580-00\ORDER

Dear (see distribution list)

(followed by original)

(see e-mail distribution list)

This letter is to inform you that for the purposes of section 8 of the Order Establishing Provincial Non-Spatial Old Growth Objectives, the following landscape units within the Ministry of Sustainable Resource Management's Coast Region (Nanaimo office) have identified draft Old Growth Management Areas (OGMAs). This identification is only for the purposes of preparing results or strategies in a Forest Stewardship Plan related to the Old Growth Order.

Please note that this is not the legal establishment of these OGMAs. First Nations consultation is still to be completed on these units as well as public review and comment.

Should you have any questions regarding this identification for the purposes of section 8 of the Old Growth Order please call Ron Cotton at 250-751-7258.

Vancouver Island

Planning Area	Landscape Unit Name
Barkley Sound	Maggie (TSA portion)
	Toquart
	Effingham (TSA portion)
	Henderson (TSA portion)

The Official maps of the draft OGMAs are available at:
http://srmwww.gov.bc.ca/or/srmp/index.htm

If you require assistance in accessing the digital files or map files, please contact Brian Cavanaugh at 250 751-3148 for assistance.

Ministry of Sustainable Resource Management
Resource Management Division Coast Region
2080-A Labieux Road Nanaimo BC V9T 6J9

Page two
Distribution Lists
File: 17580-00/ORDER

Original signed by

Warren Mitchell

Warren Mitchell
Regional Director

pc:

Dick Heath, Regional Manager, Environmental Stewardship
Ministry of Water, Land and Air Protection, Nanaimo

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Cindy Stern, Regional Executive Director
Coast Region, Ministry of Forests

Rick Mayson, Team Leader (Nanaimo)
Ministry of Sustainable Resource Management

Gary Sutherland, Team Leader (Surrey)
Ministry of Sustainable Resource Management

Attachment – Distribution List

1.3.2 Vancouver Island Land Use Plan Higher Level Plan Order

BRITISH COLUMBIA

Vancouver Island Land Use Plan
Higher Level Plan Order

Order Establishing Resource Management Zones and Resource Management Zone Objectives within the area covered by the Vancouver Island Land Use Plan, pursuant to sections 3(1) and 3(2), as well as section 9.1 of the Forest Practices Code of British Columbia Act (the Act)

I. **Pursuant to section 3(1) of the Act, the following zones, as presented on Map 1 (attached), are Resource Management Zones (RMZ):**

A. Special Management Zones (SMZ) 1 through 14 and 17 through 22;

B. Resource Management Zones 4, 5, 6, 8, 10, 11, 15, 18, 19, 21, 23, 24, 27, 28, 30, 36, 38, 40, 42, 43, 44, and 47; these RMZ are also referred to as Enhanced Forestry Zones (EFZ);

C. Resource Management Zones 7 and 14; these two RMZ are also referred to as General Management Zones (GMZ).

II. **Pursuant to section 3(2) of the Act, the following provisions are Resource Management Zone objectives:**

A. ***for Special Management Zones 1 through 14 and 17 through 22:***

1. Sustain forest ecosystem structure and function in SMZs, by:
   (a) creating or maintaining stand structures and forest attributes associated with mature[1] and old[2] forests, subject to the following:
      i. the target for mature seral forest should range between one quarter to one third of the forested area of each SMZ[3]; and
      ii. in SMZs where the area of mature forest is currently less than the mature target range referred to in (i) above, the target amount of mature forest must be in place within 50 years;
   (b) retaining, within cutblocks[4], structural forest attributes and elements with important biodiversity functions[5]; and
   (c) applying a variety of silvicultural systems, patch sizes and patch shapes across the zone, subject to a maximum cutblock size of 5 ha if clearcut, clearcut with reserves or seed tree silvicultural systems are applied, and 40 ha if shelterwood, selection or retention silvicultural systems are applied[6].

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[1] The mature seral forest is defined as generally 80 to 120 years old or older, depending on species and site conditions. The structure of mature seral forests generally includes canopies that vary vertically or horizontally, or both. The age and structure of the mature seral stage will vary significantly by forest type and from one biogeoclimatic zone to another.

[2] The old seral forest is defined as generally greater than 250 years old, containing live and dead (downed and standing) trees of various sizes, including large diameter trees, and of various tree species, including broad-leaved trees. The structure of old seral forest varies significantly by forest type and from one biogeoclimatic zone to another.

[3] Mature seral targets will be established through landscape unit planning. See transition provisions under III.

[4] Within cutblocks generally means non-contiguous with cutblock boundaries.

[5] This includes, but is not limited to snags, wildlife trees, downed logs.

[6] Maximum cutblock sizes refer to net area to be reinvested.

Vancouver Island Land Use Plan
Higher Level Plan Order

2. Despite subsection 1(c) above, cutblocks larger than 5 or 40 ha, as the case may be, may be approved if harvesting is being carried out to recover timber that was damaged by fire, insects, wind or other similar events and wherever possible, the cutblock incorporates structural characteristics of natural disturbances.

3. Pursuant to section 2(1) of the Operational Planning Regulation (OPR)[7], the approval of both the district manager, Ministry of Forests and the designated environment official, Ministry of Environment, Lands and Parks is required for all forest development plans, or parts of forest development plans that relate to areas within the following SMZs: 1, 3, 4, 6, 8, 9, 10, 11, 13, 17, 19, 20 and 21.

B. ***for Special Management Zones 8, and 13, and parts of Special Management Zones 1, 3 and 11, which are located within landscape units with higher biodiversity emphasis, as shown on Map 2:***

4. Maintain late-successional habitat elements and attributes of biodiversity[8] in forested ecosystems with emphasis on regionally rare and underrepresented ecosystems, by retaining old seral forest at the site series/surrogate level of representation[9].

5. Retain late-successional habitat elements and attributes of biodiversity in patches of variable size.

C. ***for the following Special Management Zones with primary visual resource values: 1, 2, 3, 5, 6, 7, 10, 11, 12, 13, 14, 18, 19 and 22, as shown on Map 3:***

6. Maintain the visual quality of known scenic areas in accordance with the recommended visual quality classes in the visual landscape inventory, until the district manager establishes visual quality objectives for the areas.

D. ***for all Enhanced Forestry Zones, as shown on Map 1, save and except the parts of those zones which are designated as community watersheds as defined in section 41(8) of the Act:***

7. To increase the short-term availability of timber,

   (a) a cutblock may be larger than 40 ha pursuant to section 11(2)(a) of the OPR; and
   (b) pursuant to section 68(4) of the OPR, a cutblock is greened-up if it is adequately stocked and the average height of those trees that are
      (i) the tallest tree in each 0.01 ha plot included in a representative sample, and
      (ii) a commercially valuable species or other species acceptable to the district manager
   is at least 1.3 meters;

---

[7] BC Reg. 107/98 O.C. 426/98 - Effective: June 15, 1998.

[8] This includes, but is not limited to: large diameter (> 60 cm) live, decaying and dead standing trees (providing nest and cavity sites); downed wood, including large diameter pieces (50 to 150 cm); deciduous broad-leaved trees, both in riparian and upland areas.

[9] The level of representation of old seral forest will be applied through landscape unit planning.

unless the district manager determines that a cutblock referred to under (a) or (b) would significantly impact specific hydrological, wildlife, biodiversity, scenic or recreation values.

8. Avoid or mitigate adverse hydrological impacts, which may result from the practices referred to in objective 7, in watersheds with significant watershed sensitivity and significant fisheries values, as determined by the district manager and designated environment official.

9. When proposing the species composition for the purposes of OPR section 39 (3) (c), a person may, pursuant to OPR section 41, select a single species that is ecologically suited to the area, if a mix of species was present on the area before the timber was harvested.

9.1 The area that may be subject to selection of a single species pursuant to objective 9 is limited to no more than 20 per cent of the forested area of any variant within a given EFZ.

E. *for Resource Management Zones 7 and 11:*

10. To avoid severe social and economic consequences, as determined by the district manager and the designated environment official, the full target of 13 per cent for old growth retention in CWHvm1 may be reduced by up to one third provided that ecologically suitable second growth forest is identified to recruit the shortfall[10].

F. *for Resource Management Zone 42:*

11. Retain old seral forest in CWHvm1 in accordance with the full old seral target of 13 per cent for the variant.

11.1 Despite objective 11, up to one third of the old seral target may be recruited from second growth provided that

(a) such recruitment is necessary to avoid severe social and economic consequences;

(b) such recruitment will not impact the ability to conserve suitable habitat of identified wildlife in accordance with the Identified Wildlife Management Strategy[11]; and

(c) ecologically suitable second growth forest is identified to recruit the shortfall.[12]

G. *for Special Management Zone 10:*

12. Retain or recruit old growth forest in CWHxm2 in accordance with the full old seral target of 9 per cent for the variant.

H. *for Resource Management Zone 10*

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[10] The targets for retention or recruitment of old growth forests will be achieved through the establishment of old growth management areas as part of landscape unit planning.

[11] See "Managing Identified Wildlife: Procedures and Measures", Volume 1, February 1999.

[12] The targets for retention or recruitment of old growth forests will be achieved through the establishment of old growth management areas as part of landscape unit planning.

Vancouver Island Land Use Plan
Higher Level Plan Order

13. Retain old seral forest in CWHxm2 in accordance with the full old seral target of 9 per cent for the variant.

13.1 Despite objective 13, up to one third of the old seral target may be recruited from second growth provided that

(a) such recruitment is necessary to avoid severe social and economic consequences;

(b) such recruitment will not impact the ability to conserve suitable habitat of identified wildlife in accordance with the Identified Wildlife Management Strategy[13], and

(c) ecologically suitable second growth forest is identified to recruit the shortfall.[14]

I. *for Resource Management Zone 30:*

14. Retain all remaining old growth forest in CWHxm2 until landscape unit objectives for old growth retention or recruitment have been established in accordance with the full old seral target of 9 per cent for the variant.

J. *for Resource Management Zones 8, 14, 28 and 43:*

15. Retain old growth forests to meet old seral targets[15] and marbled murrelet habitat requirements[16] in the non-contributing[17] land base to the fullest extent possible.

16. Beyond retention in the non-contributing land base, retain old forests in the timber harvesting land base, up to the full target amount, if the district manager and the designated environment official determine that such retention is required to maintain critical marbled murrelet habitat[18].

III. Transition

17. Pursuant to section 9.1 of the Act, the following objectives will not be implemented in an area until landscape units and objectives have been established for the area, in accordance with section 4 of the Act:
Objectives 1(a); 4; 5; 10; 11; 11.1; 12; 13; 13.1; 15; and 16.

18. In the event that landscape units and objectives are not established in an area within 2 years of the date that this order takes effect, the objectives referred to in paragraph 17 will be implemented in the area.

IV. Filing the Order

This order will be filed with the regional manager of the Vancouver Forest Region and will take effect on December 1, 2000.

---

[13] See "Managing Identified Wildlife: Procedures and Measures", Volume 1, February 1999.

[14] The targets for retention or recruitment of old growth forests will be achieved through the establishment of old growth management areas as part of landscape unit planning.

[15] See "Landscape Unit Planning Guide", March 1999.

[16] See "Managing Identified Wildlife: Procedures and Measures", Volume 1, February 1999.

[17] Non-contributing: the crown forested land base that does not contribute to the annual allowable cut, but does contribute to biodiversity objectives and targets.

[18] Retention or recruitment of old growth forests will be achieved through the establishment of old growth management areas as part of landscape unit planning.

Vancouver Island Land Use Plan
Higher Level Plan Order

The Honourable Jim Doyle
Minister of Forests

Date 24/Oct/00

The Honourable Joan Sawicki
Minister of Environment, Lands and Parks

Date 19/10/00

The Honourable Dan Miller
Minister of Energy and Mines

Date 19/10/00

1.3.3 Community Watersheds (Letters)

For further information regarding stewardship and planning objectives for the South Island Forest District, refer to the following website:

www.for.gov.bc.ca/dsi/

For further information regarding the FRPA Resource Evaluation Program, refer to the following website:

http://www.for.gov.bc.ca/ftp/dsi/external/!public/Stewardship/SIFD_Objectives_Matrix/

1.3.4 Fisheries Sensitive Watersheds (Letters)

BRITISH COLUMBIA

Distribution: Laing, John; Sposato, Luigi; Powell, Dan copied Tenure 2001/02/15
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Contact: Laurie McCulligh
Date typed: 2000/12/21 Date last saved: 2001/02/02 3:13 pm

File: 17370

February 6, 2001

All Licensees, South Island Forest District

With the signing of the Higher Level Plan (HLP) Order for the Vancouver Island Summary Land Use Plan (VILUP), my expectations with regards the sections on hydrological impacts in Enhanced Forestry Zones (EFZs) are set out in this letter.

Section II D., objectives 7 and 8 of the HLP Order for the VILUP refer to EFZs outside of Community Watersheds. These objectives state:

7. To increase the short-term availability of timber,

   (a) a cutblock may be larger than 40 ha pursuant to section 11(2)(a) of the OPR, and

   (b) pursuant to section 68(4) of the OPR, a cutblock is greened-up if it is adequately stocked and the average height of those trees that are

      (i) the tallest tree in each 0.01 ha plot included in a representative sample, and

      (ii) a commercially valuable species or other species acceptable to the district manager

   is at least 1.3 meters,

8. Avoid or mitigate adverse hydrological impacts, which may result from the practices referred to in objective 7, in watersheds with significant watershed sensitivity and significant fisheries values, as determined by the district manager and designated environment official.

In most cases, the Ministry of Environment, Lands and Parks (MELP) and the Ministry of Forests (MOF) are aware of watersheds that have significant fisheries values. These values are as determined by MELP and Fisheries and Oceans Canada (FOC) stream ratings (see 'Stream Ratings for Fisheries, attached). With a score of 25 or greater (on application of either system) a stream is considered to have significant fisheries values.

However, for many watersheds, the licensees' input will be required in determining which are watersheds with 'significant watershed sensitivity' within EFZs. The definition of a watershed

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with 'significant sensitivity' is from the Vancouver Island Summary Land Use Plan, page 89. It usually includes watersheds where:

- 'the total area harvested during the past 20 years, including the yet to be harvested area of a proposed forest development plan, exceeds 25% of the total watershed area, and
- a significant number of landslides that entered the stream channel are known to have occurred; or
- stream channel stability problems are evident; or
- over 25% of the riparian forest along either bank of the main stream channels has been logged over the past 40 years; or
- landslide problems are anticipated due to recent harvesting on unstable terrain.'

It is my expectation that for any watershed listed in the following table, the licencee(s) will initiate and complete discussions with MOF, MELP and FOC representatives within the next 12 months to determine whether a Watershed Assessment Procedure (WAP) and/or other information for the watershed is required. If it is required, a terms of reference and timetable for watershed or other assessments will be developed.

For FDPs submitted for approval within this 12 month period, I do not expect WAPs to be completed unless the licencee chooses to extensively implement sections 7 and 8 of the HLP.

I also realize that some of these watersheds are quite large and it may be that only certain sub-basins require a WAP. These decisions can be made within this 12-month period. As Community Watersheds are not included within EFZs, **this list is in addition to those assessments required for Community Watersheds**.

VILUP Enhanced Forestry Zone # and Name	**Watershed Name**	**Comments**	**Tenures Involved**
RMZ #42 Corrigan	Franklin/Corrigan		TFL 44
RMZ #43 Sarita	Sarita	Develop recommendations to guide FDP based on existing Forest Renewal British Columbia (FRBC) watershed assessment and additional assessment as may be required to meet current CWAP equivalency.	TFL 44
RMZ #43 Sarita	Pacheena River		TFL 44

RMZ #44 Klanawa	Klanawa	Watershed assessment to be limited to a comprehensive sediment source survey identifying positive and negative trends in sediment sources and delivery as a result of development, deactivation, and restoration since the last report in addition to reporting on implementation of specific recommendations contained in the last watershed assessment.	TFL 44
RMZ #47 Loss-Jordan	Jordan River		TFL 25/ private

For Areas Outside of Enhanced Forestry Zones:

A.

In addition, there are areas outside of the Enhanced Forestry Zones for which I, Cindy Stern, District Manager, MOF, and Dick Heath, Designated Environment Official, MELP, have determined that there are significant concerns with respect to the fisheries resource within the South Island Forest District. In accordance with Section 14(1)(c) of the *Operational Planning Regulations* (*OPR*) of the *Forest Practices Code of British Columbia Act* (*FPC Act*), I direct that watershed assessments be conducted for the list of watersheds in the table below. Assessments are required where harvest operations and/or road construction or modification are being planned.

It is my expectation that prior to beginning these assessments, discussions will be held with staff of MOF and MELP, Water Management Branch to determine the focus of the assessment and whether a Watershed Advisory Committee (WAC) will be required.

WAPs currently in effect have a life expectancy defined in the *OPR*. The objective of redirecting/directing WAPs through this letter is not to require replacement WAPs in advance of the *OPR* defined WAP life expectancy, but rather to provide licencees sufficient advance notice of WAP requirements to meet their future forest development plan schedules. Please contact MOF/MELP prior to beginning assessment.

These watersheds are in addition to any assessments required for Community Watersheds.

Watershed Name	**Tenures Involved**	**Comments**
Harris (within San Juan watershed)	TFL 46/ TSA (FL A52027) / private	Assessment is being directed at this time. Please contact MOF/MELP prior to beginning assessments.

Hemmingsen (within San Juan watershed)	TFL 46/ TSA (FL A52027) / private	Assessment is being directed at this time. Please contact MOF/MELP prior to beginning assessments.
Nahmint River	TFL 44	WAP previously completed – Assessment is being directed at this time Previous watershed assessment indicated a low incidence of instability or sediment delivery associated with development. Most sediment sources previously identified are of natural origin. It places emphasis on management of landslide prone terrain. It is anticipated that further assessment would be limited to an update on sediment sources, terrain management and reporting on the implementation of previous recommendations.
Escalante River	TSA (FL A19235) / TFL 54 / Western Forest Products (Timber Licence)	WAP previously completed – 1999. Incidence of landslides was high as compared to actual sediment delivery to streams. Further assessment at this time should be limited to reporting on the incidence of development related landslides, if any, since the previous assessment. If there has been terrain instability, it should be noted whether terrain stability field assessments were completed where it occurred. If they were completed it should be noted whether activities followed or departed from recommendations made.
Gordon River	TFL 46/ TSA (including FL A52027) / private land	Unless TimberWest has new information to bring forward, update would be appropriately limited to the sediment source survey, reporting on hydrologic recovery, and an updated report card as per the CWAP Guidebook. Forest development plans are to report on implementation or departures from recommendations contained in previous assessment and updated sediment source survey.

B.
It is my expectation that for any watershed listed in the following table, the licencee(s) will initiate and complete discussions with MOF, MELP and FOC representatives within the next 12 months to determine whether a WAP will be required. If it is required, a terms of reference and timetable for watershed assessment will be developed.

I realize that these watersheds are quite large and it may be that certain sub-basins only require a WAP. These decisions can be made within this 12-month period. **This list is in addition to those required within Community Watersheds.**

Watershed Name	Tenures Involved	Comments
Ash River	TFL 44/ Strathcona Park/ private	
Caycuse	TFL 44/ TFL 46	For the portion of the watershed not already directed, (i.e. assessment for Hatton has been directed))
China Creek	TFL 44	China Creek below community watershed. High fisheries values with potential sensitivity. Sensitivity to forest development as defined in the *FPC* Act to be reviewed with MOF, MELP and FOC as a basis for determining watershed assessment requirements if any.
Walbran Creek	TFL 44	High fisheries values with potential sensitivity. Sensitivity to forest development as defined in the *FPC* Act to be reviewed with MOF, MELP and FOC as a basis for determining watershed assessment requirements if any.
Upper Nitinat River	TFL 44	

If you have any questions regarding this letter or its implementation, please contact Luigi Sposato District Planner at (250)731-3037.

Yours truly,

Cindy Stern
District Manager
South Island Forest District

pc: Dick Heath, Ministry of Environment, Nanaimo
Warren Cooper, Ministry of Environment, Nanaimo
Brad Rushton, Fisheries and Oceans Canada

Effingham River / 17370-03/ Jan. 12, 2001

BRITISH COLUMBIA

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File: 17370-03 Effingham

January 12, 2001

Kelly Eakins,
Forest Hydrologist
Eakins Hydrological Consulting
6559 Chisholm Trail
Duncan, British Columbia
V9L 5X9

Dear Kelly Eakins:

Thank you for your letter of December 31, 2000 regarding assessment of the Effingham River.

As you know, Watershed Assessment Procedures (WAPs) currently in effect have a life expectancy defined in the *Operational Planning Regulation (OPR)* of the *Forest Practices Code of British Columbia Act)*. The objective of redirecting the WAP through the letter of October 30, 2000 is not to require a replacement WAP in advance of the *OPR* defined WAP life expectancy, but rather to provide licencees sufficient advance notice of WAP requirements to meet their future forest development plan schedules.

Please contact Laurie McCulligh, A/ District Planner at (250)731-3062 if you have any further concerns or questions.

Yours truly,

Cindy Stern
District Manager
South Island Forest District

pc: Zoltan Schafer, RPF
International Forest Products
West Coast Operations

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Effingham River / 17370-03/ Dec. 31, 2000

Eakins Hydrological Consulting
6659 Chisholm Trail
Duncan, B.C. V9L 5X9

December 31, 2000

Ministry of Forests
South Island Forest District
4885 Cherry Creek Road
Port Alberni, B.C. V9Y 8E9

ATTENTION: Ms. Cindy Stern
District Manager

Dear Ms. Stern,

RE: Effingham River CWAP Update

In your letter to Mr. Bob Howie of Coulson Forest Products Ltd., and Mr. Zoltan Schafer of International Forest Products Ltd., dated October 30, 2000, an assessment of the Effingham River watershed was requested.

The original watershed assessment, or CWAP, was completed and submitted to Coulson and Interfor in September, 1998. Since that time, there has been no logging or forest development on Interfor's FL or on Coulson's TFL. Neither Interfor or Coulson have made any changes to their 1998-2002 FDP's with the exception of Interfor changing many blocks from clearcut to partial retention. Neither company has plans for development until 2001.

At the time of reporting, hydrologic concerns were directed at the lower alluvial channel and naturally unstable slopes in the headwaters above Effingham Lake. Forest development proposed in 1998 by both companies was situated away from the main Effingham River and the majority of unstable terrain within proposed blocks had been avoided.

Based on the absence of forest development activities in the lower Effingham River since the late 1960's and in the upper Effingham since early 1998, I recommend that the update to the September 30, 1998 report be postponed until September 2001. The update may be completed prior to that date if development activities in the Effingham watershed commence.

If you have any further questions or comments regarding the Effingham River CWAP, I would be more than pleased to answer them for you.

Yours truly,
K Eakins

Kelly Eakins, M.Sc.
Forest Hydrologist

cc. Zolie Schafer, RPF
Interfor, West Coast Operations

Escalante River/ 17370-03/ Apr. 26, 1999

BRITISH COLUMBIA

[redacted]/Escalante

April 26, 1999

Zolie Schafer, R.P.F.
International Forest Products Limited
Post Office Box 479
630 Campbell Street
Tofino, British Columbia
V0R 2Z0

Dear Zolie Schafer:

The Escalante River watershed has been identified by the District Manager, South Island Forest District and the Designated Environment Official, Ministry of Environment, Lands and Parks, as a watershed with significant downstream fisheries values. As such, I am instructing a watershed assessment (CWAP) for all or a portion of the Escalante watershed (watershed atlas # 930.4808) under section 14(1)(b) of the *Operational Planning Regulation (OPR)*.

I expect that a CWAP roundtable of affected parties and agencies will be convened prior to initiating the CWAP field work, data gathering, analysis and report writing to review and make recommendations on the following items prior to my final CWAP instructions:

1. Since the Escalante watershed has two major tributaries and forest lands under management by Interfor under Tree Farm Licence (TFL) 54 and Forest Licence (FL) A19235, reverted Timber Licences to the Crown and Timber Licences held by Doman-Western Lumber Ltd. I expect the roundtable to provide recommendations to myself as to whether a CWAP will be completed on all or a portion of the Escalante watershed at this time. Upon receipt of these recommendations, I will provide written direction on the extent of the CWAP for the Escalante watershed.

2. Section 14(2) of the *OPR* provides the instructions for completing a CWAP. Section 14(2)(b) provides an ability to complete the CWAP with alternative procedures. I request that the roundtable review the CWAP procedures and make recommendations on the procedures. Upon receipt of these recommendations, I will provide written direction on the CWAP procedures for the Escalante watershed.

.../2

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I am requesting these CWAP roundtable recommendations prior to providing final CWAP instructions inorder to ensure the CWAP provides adequate, clear direction to subsequent forest development plans and to minimize the cost of completing the CWAP.

Please note that section 14 of the *OPR* requires the CWAP to be completed prior to the submission of a forest development plan. Based upon the CWAP guidebook flowchart procedures, I consider that this means a CWAP roundtable will convene following the licencee hydrologist report and provide the roundtable CWAP recommendations that a professional forester must consider in the preparation of the forest development plan.

If you have any questions, please contact Madeline Maley, Planning Forester, at 250-724-9219.

Yours truly,

Cindy Stern
District Manager
South Island Forest District

pc: B. Cerenzia, MOELP, Port Alberni, BC
B. Rushton, DFO, Port Alberni, BC

Toquart River / 17370-03/ Oct. 30, 2000

Effingham River / 17370-03/ Oct. 30, 2000

BRITISH COLUMBIA

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File: 107370-03/Toquart

October 30, 2000

Bob Howie, R.P.F.
Coulson Forest Products Ltd
4590 Helen Street
Port Alberni, British Columbia
V9Y 6P5

Zoltan Schafer, RPF
International Forest Products Limited
PO Box ~~479~~ 1865 Peninsula Rd.
630 Campbell Street P.O. Box 789
Tofino, British Columbia V0R ~~2Z0~~
Ucluelet 3A0.

Dear Bob Howie and Zoltan Schafer:

I, Cindy Stern, District Manager Ministry of Forests, and Dick Heath, Designated Environment Official, Ministry of Environment, Lands and Parks, have determined that there are significant concerns with respect to the fisheries resources in the Toquart River and Effingham River watersheds.

It is my determination that an assessment of the Toquart River watershed must provide an analysis of and recommendations for the entire watershed. As such, my instruction to Coulson Forest Products Ltd. is to proceed with a watershed assessment as per Section 14(1)(b) of the *Operational Planning Regulation* (*OPR*) of the *Forest Practices Code of British Columbia Act (FPC Act)*.

It is also my determination that an assessment of the Effingham River watershed is required. As such, my instruction to Coulson Forest Products Ltd. and International Forest Products Ltd. is to complete an update to the report of September 30, 1998 as per Section 14(1)(b) of the *OPR* of the *FPC Act*. That report must provide an analysis of and recommendations for the entire watershed.

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Bob Howie and Zoltan Schafer

A map showing the boundaries of the watersheds requiring assessment is attached.

It is my expectation that prior to beginning these assessments, discussions will be held with staff of Ministry of Forests and Ministry of Environment, Lands and Parks Water Management Branch to determine the focus of the Watershed Assessment Procedure (WAP). It is also my expectation that these WAPs be completed in a timely manner to meet the requirements of the *OPR* for Forest Development Plan consideration.

If you have any questions or require additional information, please contact Laurie McCulligh at (250)731-3062.

Yours truly,

Cindy Stern
District Manager
South Island Forest District

Enclosure(s): map

pc: Dick Heath, Regional Fish and Wildlife Manager, MELP, Nanaimo
Warren Cooper, Water Management, MELP, Nanaimo

1.3.5 Recreation (Letter)

BRITISH COLUMBIA

File: 16310-01
19500-01
19700-01

May 14, 1999

All Licencees
South Island Forest District

Dear Licencee:

The intent of this letter is to advise South Island ForestDistrict Licensees of those Ministry of Forests recreation sites and trails that are considered to be known features, and the nature of licencee's obligation regarding those known features. The Operational Planning Regulation requires that for features to be known they must be:

a) contained in a higher level plan, or

b) otherwise made available by the District Manager or designated environment official at least 4 months before an operational plan is submitted for approval.

The licencee's obligation is to ensure that known features are identified in all forest related planning including Forest Development Plans(OPR 20 (1)(a)(i) and Logging Plans (OPR32(a)(x). The Operations Planning Regulation also stipulates that a silviculture prescription(sp) must describe the site conditions that must exist, if any, after a harvest or site treatment to accommodate resource features identified in the forest development plan or silviculture prescription [OPR Section 39(3)(m)(ii(B)] and OPR Section 39(4)(a)(vi).

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All Licensees
Page 2

Pursuant to of the Operational Planning Regulation the following recreation sites and trails shall be considered known features effective four months from the date of this letter.

1. Fairy Lake
2. Lizard Lake
3. San Juan Bridge
4. Ball Mountain
5. Nixon Creek
6. Pine Point
7. Maple Grove
8. Spring Beach
9. Shaw Creek
10. Nitinat Lake
11. Knob Point
12. Flora Lake
13. Sarita Lake
14. Sarita Point
15. Arden Creek
16. Nahmint Lake Site and Trail
17. Blackies Beach
18. Snow Creek
19. Lowry Lake
20. Stout Beach
21. Toquart Bay
22. Clayoquot Arm Beach
23. Bedwell River Trail
24. Labour Day Lake
25. Father and Son Lake
26. Legion Trail
27. Old Baldy Trail
28. Kludahk Trail
29. Long Lake Trail
30. Cowichan Valley Demonstration Forest
31. Cobble Hill
32. Koksilah River
33. Canoe Creek
34. Lost Shoe Trail
35. Stamp River
36. Climbers Trail

Maps have been enclosed identifying the locations and/or boundaries of the above recreation sites and trails. If you should have any questions regarding the above, please contact Randy Taylor of my staff at (250) 724-9372.

Yours truly,

Cindy Stern
District Manager
South Island Forest District

pc: MoF SBFEP/Tenures Staff

1.3.6 Visual Quality (Letter)

Visuals

BRITISH COLUMBIA

File: 16290-01, 19500-01, 19700-01

November 13, 1998

To: All Licensees
South Island Forest District

Dear Sir/Madam:

The intent of this letter is to clarify the nature of licensee's obligations regarding scenic area management within the South Island Forest District (SIFD) under the *Forest Practices Code of British Columbia Act* (FPC Act). This letter supersedes a letter dated October 17, 1996 issued for the former Duncan Forest District by Jerry Kennah, District Manager (DM). Scenic areas are defined in Section 1 of the *Operational Planning Regulation* (OPR). Scenic areas are any visually sensitive area or scenic landscape identified through a Visual Landscape Inventory (VLI) or planning process carried out or approved by the DM.

Further to the above, Section 1, Sub-section (3) of the OPR requires that scenic areas be defined at least four months prior to a Forest Development Plan (FDP) submission to qualify as known.

The SIFD has completed VLIs for most areas on Crown lands along visual corridors within the Arrowsmith Timber Supply Area. VLIs have also been approved for Tree Farm Licences 25, 44, 46, 47 and 54 within the SIFD. Scenic areas identified as known within the boundaries of the SIFD include all visual landscapes associated with views from the following travel corridors:

1. Highway 1 and 19 from Victoria to the Tsable River including Denman and Hornby Islands
2. Highway 4 from Parksville to Ucluelet and Tofino
3. Sproat Lake
4. Alberni Inlet from Port Alberni to Bamfield
5. Nahmint River Valley

.../2

6. Clayoquot Sound
7. Barclay Sound - including views between Tzartus Island and Toquart Bay
8. Coastal shorelands between Toquart Bay and Ucluelet
9. Toquart River Valley to the north end of Toquart Lake
10. Effingham Inlet, Pipestem Inlet and Uchucklesit Inlet
11. Escalante
12. Zuciarte Channel
13. Mooyah Bay/Mooyah River Valley
14. Great Central Lake
15. Bamfield Road from Port Alberni to Bamfield
16. South Main from Franklin River to Caycuse River Junction
17. Rosander Main from Caycuse River to Carmanah Provincial Park
18. Nitinat Lake
19. Klanawa River from the Pacific Ocean to the West Klanawa Junction
20. Pacific Ocean from Cape Beale to Carmanah Point
21. Highway 14 - Victoria to Port Renfrew
22. San Juan Ridge Trail/San Juan Low Intensity Area
23. Shawnigan Lake
24. Highway 18 - Duncan to Honeymoon Bay
25. Gordon River travel corridors from Port Renfrew to Gordon River Bridge
26. Port Renfrew to the Harris Creek Valley to a point just north of the old Harris Creek Camp (vicinity of Hillcrest Main Junction)
27. Caycuse/McLure mainline travel corridor from Honeymoon Bay to Glad Lake mainline
28. Walbran Low Intensity Area
29. Caycuse/Nixon Creek/Nitinat River to South Main Junction
30. San Juan River Valley from Port Renfrew to the San Juan River at the San Juan River recreation site.
31. Nanaimo Lakes/Ladysmith, Block 15 and 16 of TFL 47

Known scenic areas within the SIFD must be consicered in all forest related planning, including the preparation of FDPs. All forest related operations in landscape units containing recommended retention, partial retention or modification visual quality classes as seen from viewpoints will require a visual impact assessment (VIA). The VIA must be completed prior to the submission of the Silviculture Prescription (SP) but it is not required to be submitted with the SP (OPR 37 (1)(a)). The district manager may request that a VIA be made available for review. The conditions of this letter shall become effective four months from the date of this letter and all forest related planning including Forest Development Plans must identify and describe known scenic areas and must specify measures that will be carried out to protect these resources (refer to Section 18(1) of the OPR and Section 10(c)(ii) of the FPC Act). Scenic areas made known under the former Duncan Forest District are still considered to be in force as of February 17, 1997.

however the management of those scenic areas will be subject to the conditions within this letter effective immediately.

The areas modified from the February 17th letter include the following:

1. Gordon River Travel Corridor
2. San Juan River Valley Corridor

The recommended Visual Quality Classes (RVQC's) identified in the district are currently being considered but are not binding under the FPC act. Licencees may wish to use them when planning how to manage and conserve the resources as identified in Section 41 (1)(b) until such time as Visual Quality Objectives (VQO) are formally established.

In order to ensure landscape values are adequately managed and conserved, specific visual landscape information such as photo mosaics, digital terrain models, sightlines from specific viewpoints, maps and written descriptions of the proposed developments may be necessary to assess whether a proposed cutblock has achieved the desired visual objectives. Please refer to the attached District Operational Procedure on Visual Impact Assessments and the VIA Guidebook for assistance when completing VIA's.

It is suggested that management of scenic areas should be co-ordinated with other FPC requirements that may affect the visual landscape, where possible. I have enclosed a copy of FPC Bulletin #7 on Scenic Areas dated February 26, 1996 for you reference. I would also like to emphasize it is critical that the use of landscape design and alternative silviculture systems be employed in cutblock design so that RVQC's and timber supply requirements can be achieved.

Please ensure that this information reaches the appropriate personnel charged with operational programs. If you require further information or assistance please contact John Laing or Randy Taylor at (250) 724-9205 using the following as a guide:

John Laing	Forest Development Plan submissions Logging Plans Silviculture Prescriptions
Randy Taylor	Visual Landscape Inventories Scenic Areas Visual Impact Assessments Recreation Inventories/Special Features

Yours truly,

Cindy Stern
District Manager

1.3.7 Ungulate Winter Range (Order)

BRITISH COLUMBIA

ORDER – UNGULATE WINTER RANGE #UI-017

On being satisfied that the establishment of the ungulate winter range dealt with in this order is necessary to meet the habitat requirements of the ungulate species, and that the management objectives dealt with in this order are necessary to maintain the ungulate species within those areas, and under the authority of section 69 (1) (a) and (b) of the Operational and Site Planning Regulation, B.C. Reg. 107/98, the Deputy Minister of Water, Land and Air Protection orders that

1. the ungulate winter range shown in the map set out in the attached Schedule A (#UI-017) is established;
2. the ungulate winter range referred to in section 1 is approved for black-tailed deer (*Odocoileus hemionus columbianus*) and Roosevelt elk (*Cervus elaphus roosevelti*); and
3. the following practices are established as management objectives inside the ungulate winter range referred to in section 1:

For UWR units 1 through 46:

Goal

To maintain or enhance the existing combination of topographic and vegetative features within the designated ungulate winter ranges.

Objective 1

Road construction is not to occur within the designated ungulate winter ranges, with the exception of UWR unit 12 (Effingham), unless there is no other practicable option, the quality of the winter ranges will not be significantly affected and a variance is approved by the MWLAP Statutory Decision Maker or designate. For UWR unit 12 (Effingham), the MWLAP Statutory Decision Maker recognises that road access is required within this UWR and main road access will traverse through the UWR to reach timber in the Effingham valley beyond.

Objective 2

Harvesting is not to occur within the designated ungulate winter ranges unless a variance is approved by the MWLAP Statutory Decision Maker or designate. A variance would only normally be considered for the purposes of enhancing the quality of the winter range.

Objective 3

Salvage harvesting is not to occur within the designated ungulate winter ranges, unless a variance is approved by the MWLAP Statutory Decision Maker or designate.

Objective 4

Road maintenance, road deactivation, felling of danger trees or brushing and clearing on existing roads to address worker safety is allowed. Felling of danger trees, felling for guy line clearance, felling of tail hold anchor trees along cutblock boundaries to address worker safety is allowed. Any trees that must be felled

ORDER – UNGULATE WINTER RANGE #U1-017

within a UWR will be left onsite to provide coarse woody debris, unless the felled tree lies outside the UWR. Licensees will ensure that UWR values are maintained and incorporated when addressing worker safety concerns.

Note: The Deputy Minister of Water, Land and Air Protection wishes to acknowledge that UWR units 12, 13, 14, 15, 16, 40 and 44 are contained within areas undergoing an industry-led landscape unit planning process in the western portion of the Arrowsmith TSA and may be reviewed by professional biologists. Revisions to UWR units 12, 13, 14, 15, 16, 40 and 44 within the Effingham, Henderson, Toquart, Maggie and Escalante landscape units may be proposed to regional WLAP staff as a result of this process and will be evaluated and forwarded for consideration by the Deputy Minister of Water, Land and Air Protection within 60 days of their receipt by regional staff.

For UWR units 47 through 51:

Goal 1
Manage the UWR areas to have a continuous supply of early seral forage that will accrue from managing the areas on a sustained basis, rather than by planning periodic larger cuts with extended regeneration periods between entries.

Goal 2
Provide and maintain security cover (visual screening) for elk between major roads and foraging areas within the designated modified management areas. A visual screen is defined here as vegetation or topography capable of hiding 90% of a standing elk from the view of a human standing on the road in question.

Objective 1
Plan the harvest sequence to ensure the following approximate seral stage distribution is maintained within the timber harvesting land base (THLB) portion of the ungulate winter range: 25% in 0-20 year old stands, 25% in 21-40 year old stands, 25% in 41-60 year old stands and 25% in 61-80 year old stands. This balanced age-class will be achieved over the next 60-80 years.

ORIGINAL SIGNED BY

Signed this _____ day of _____, 2003
Gordon Macatee, Deputy Minister
Ministry of Water, Land and Air Protection

1.3.8 Species at Risk (FPPR S. 7 Notices)

BRITISH COLUMBIA

NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN THE SOUTH ISLAND FOREST DISTRICT

This notice is given under the authority of section 7(2) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/04) and 9(3) of the *Woodlot Planning and Practices Regulation* (B.C. Reg. 21/04).

The following notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk outlined in Schedule 1.

Approved Wildlife Habitat Areas are not included in the indicators of amount, distribution and attributes for each of the species outlined in Schedule 1. As per section 7(3) of the *Forest Planning and Practices Regulation*, forest tenure holders are exempt from the obligation to specify a result or strategy in relation to the objective set out in section 7(1) of the *Forest Planning and Practices Regulation*, for approved Wildlife Habitat Areas.

This notice applies to the South Island Forest District.

Schedule 1

1) "Queen Charlotte" Goshawk (*Accipiter gentilis laingi*)

Amount:

1. 239 ha of suitable habitat not exceeding an impact to the mature timber harvesting landbase of 79 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
   - areas of suitable breeding habitat including functional nesting and post fledging habitat of the size identified in the species account for Charlotte Goshawk in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
   - areas of suitable goshawk breeding habitat to minimize overlap between goshawk home ranges (approximately 5-8 km separation).

The areas described above are located within the ecosections and preferred elevations identified in the species account for Queen Charlotte Goshawk in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).

Attributes:

Species: Queen Charlotte Goshawk

Attribute	Characteristics
Nesting and PFA Area	Approximately 200 ha in size.
Stand Features (Nesting and PFA)	Structural stage 5-7 (>45yrs), multi-layered canopies, structurally diverse, canopy closure (greater than 50%), large diameter trees (for the locale), snags and course woody debris (CWD), typically not along forest non-forest edges. Not near urban areas and generally on the lower 2/3 of slopes where slope gradient is <40%.
Tree Species (Nesting and PFA)	Western hemlock, Douglas fir, Sitka spruce, Western red cedar, amabilis fir and red alder.
Structural Stage	5 (young forest - is used but is generally not preferred), 6 (mature forest) and 7 (old forest).
Elevation (Nesting and PFA)	Areas managed for nesting must generally be below 900 m.

2) Marbled Murrelet (*Brachyramphus marmoratus*)

Amount:

1. An amount equal to the total amount of currently suitable nesting habitat in the non-contributing landbase. Government policy for determining the amount of suitable nesting habitat is provided in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. An amount of suitable Marbled Murrelet nesting habitat within Old Growth Management Areas consistent with the direction from landscape unit planning; and

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
   - areas of suitable nesting habitat of the size and spatial distribution identified in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

Attributes:

Species: Marbled murrelet

Attribute	Characteristics
Size	Maintain a balanced range of patch sizes including a mix of large (>200 ha), medium (50-200 ha) and small (<50 ha) patches within managed forests. The area should include vertical canopy complexity.
Tree Features	Large branches or branches with deformities, and presence of mossy platforms
Tree Species	It is unlikely that Marbled murrelets select particular tree species, however certain species are more likely to provide large horizontal platforms suitable for nesting. This includes yellow cedar, western hemlock, Sitka spruce, Douglas-fir and western red cedar. Less likely species include mountain hemlock and amabilis fir.
Nesting Habitat Features	Suitable nesting habitat includes old seral stage coniferous forests, providing large trees with platforms (limbs or deformities >15cm diameter) with variable canopy structure and small gaps in the canopy. Readily nest on steep slopes but is not essential if forest canopies are non-uniform.
Tree Size	Most nesting trees in BC are >200 yr. Nest trees are typically >40 m tall and nest heights are typically >30 m. Nest limbs range in size from 15-74 cm diameter.
Structural Stage	7; old forest (>250 yr - age class 9, but 8 is acceptable if older forest is not present and the age class 8 provides platform limbs and other nest attributes).
Additional information	Table 3 of the IWMS Version 2004 species account for Marbled Murrelet provides detailed information about the habitat features that are associated with most likely, moderately likely and least likely habitat within each of the Marbled Murrelet Conservation regions.

3) Scouler's Corydalis (*Corydalis scouleri*)

Amount:

1. 50 ha of suitable habitat not exceeding an impact to the mature timber harvesting landbase of 20 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
   - areas of suitable habitat, including the known populations identified in the species account for Scouler's Corydalis in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004)
2. The areas described above are located within the ecosections and preferred elevations identified in the species account for Scouler's Corydalis in the

Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004).

Attributes:

Species:
Scouler's
Corydalis

Attribute	Characteristics
Size	Typically ~10 ha in size depending on the extent of the population and suitable habitat. Should include a core (defined by the perimeter of the population) and management zone (close to 50m but may extend up to 250m)
Habitat Features	Cool, moist and moderately shady habitats usually adjacent to watercourses. Tend to be located in deciduous or mixed forest. Maintain ~60% basal stem area in the management zone and remove the 40% basal stem area in small openings. Includes west, southwest, north to northeast aspects from 0 to 45% slopes. Occurs in young and older dominant red alder stands, but is also found in mixed conifer stands with mature big-leaf maple and Sitka spruce as well as red alder, western red cedar and western hemlock.
Structural Stage	5 (young forest), 6 (mature forest), 7(old forest).
Elevation	5 - ~200 m

1.4 Other Information

1.4.1 Recreation Site Exhibit A maps

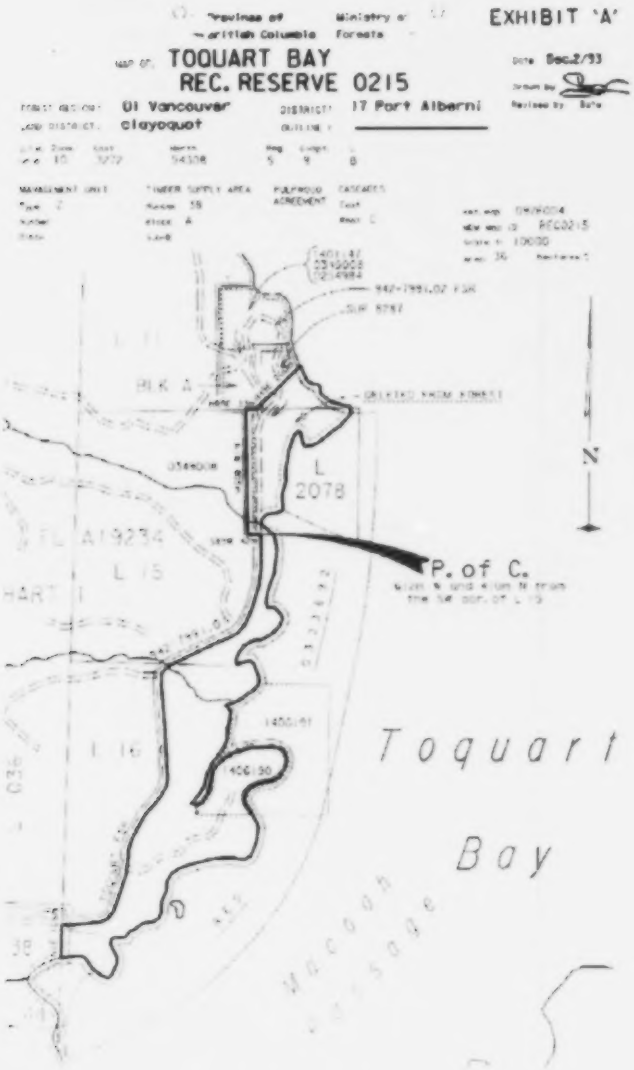


EXHIBIT 'A'

Province of British Columbia — Ministry of Forests

TOQUART BAY

MAP OF: Lost Shoe Rec. Res. 900-5600

Date: Aug 21/91

Drawn by:

Revised by: Date

FOREST REGION: 01 Vancouver

LAND DISTRICT: Clayoquot

DISTRICT: 17 Port Alberni

OUTLINE

U.T.M. Zone	East	North	Reg	Compt.	L
Orig	10	5115	5431	5	10

MANAGEMENT UNIT: Type Y, Number 46, Block

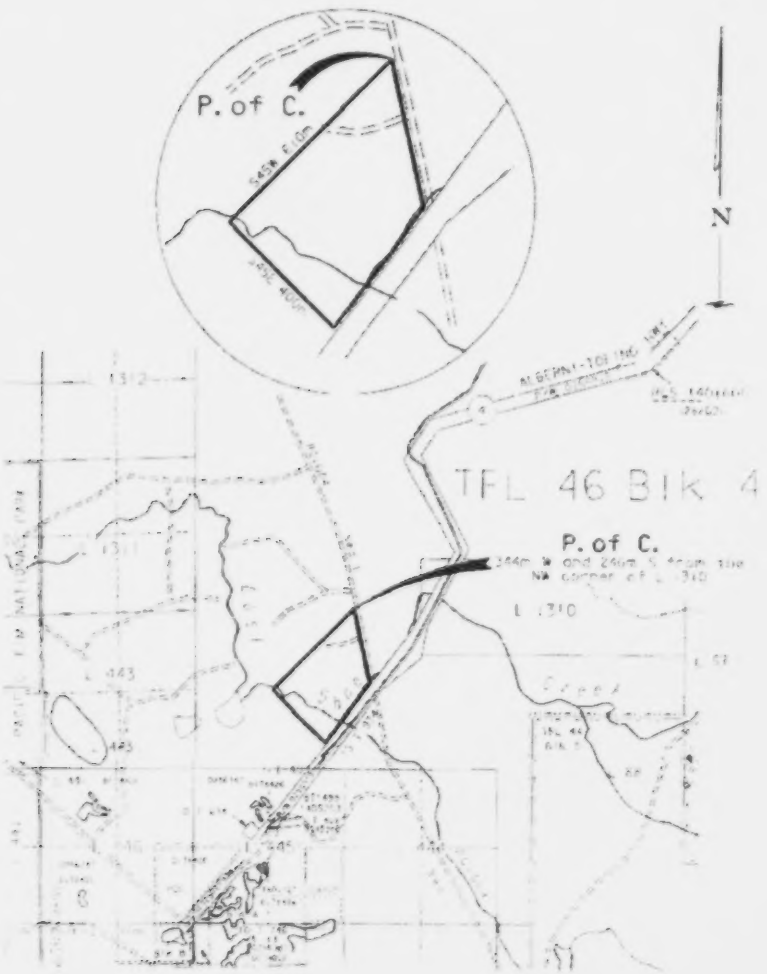
TIMBER SUPPLY AREA: Number 32, Block A, Suffix

PULPWOOD AGREEMENT: CASCADES, East, West C

Ref. Map: 121003

Scale 1: 20000

Area: 15 Hectares



2 TECHNICAL DETAILS

	Landscape Unit (LU)			Area within Forest Development Unit (FDU) Applicable to this FSP			
FDU – Lead Licensee	Associated LU	Total LU Land (ha)	% FDU (for this FSP) in LU	Total Land (ha)	Forested Area (ha)	Non-Forested Area (ha)	Comments
1 - BCTS	Barkley Sound Islands	4539	63.3	2875	2718	157	TSA only
2 - IFP	Henderson	27152	33.9	9205	7583	1622	TSA only
2 - IFP	Nahmint	19117	2.4	458	419	9	TSA only
3 - IFP	Effingham	21121	87.8	18552	15782	2770	TSA only
4 - Coulson	Toquart	15,593	94.4	14721	11534	3187	TSA only
5 - BCTS	Maggie	14501	82.1	11904	9669	2235	TSA and TFL 54
6 – IFP	Escalante	15,247	98.6	15028	12454	2574	TSA, TFL 54, TL 174 and TL 295

Forested Area - includes vegetated, treed, upland area as well as VTU non-productive and VTU- alpine forest
Non-forested Area – includes Non-vegetated, non-productive, scrub (in the Maggie FDU outside of TFL 54), and NTA (no typing available.
Total land - excludes Indian Reserves, TFL 44, Woodlot, Parksand all Private land.
Escalante LU is separated by the Campbell River and South Island Forest District boundary

Table 5: Forest Development Unit/Landscape Unit Details

2.1 Definitions

AAC – Allowable Annual Cut

BA – Basal Area

BE – Biodiversity Emphasis

BEC – Biogeoclimatic Ecosystem Classification

BCTS – BC Timber Sales

CWAP –Coastal Watershed Assessment Procedure

CWD – Coarse Woody Debris

DBH – Diameter at Breast Height

DD - Drawdown

DFAM – Defined Forest Area Management

DMH – Dwarf Mistletoe

ECA – Equivalent Clearcut Area

ENE – East – North East

EFZ – Enhanced Forestry Zone / Enhanced Resource Management Zone

FEN – Forest Ecosystem Network

FDP – Forest Development Plan

FDU – Forest Development Unit

FG – Free Growing

FIA – Forest Investment Account

FL – Forest Licence

FPC – Forest Practices Code of British Columbia Act

FPPR – Forest and Planning Practices Regulation

FRPA –Forest and Range Practices Act

FSP – Forest Stewardship Plan

FTG – Free to Grow

GIS – Geographic Information System

Ha - Hectare

HLP – Higher Level Plan

IFP - Interfor

IRF – Incidentally Retained Forest

LU – Landscape Unit

LUP – Landscape Unit Planning

LUPG – Landscape Unit Planning Guide

m^3 – Cubic Meters

M&B – MacMillan Bloedel (now Weyerhaeuser)

MAMU – Marbled Murrelet

MOF – Ministry of Forests

MSRM – Ministry of Sustainable Resource Management

NAR – Net Area to be Reforested

NC – Non-Contributing

NDT – Natural Disturbance Type

NW – North west

OG – Old Growth

OGMA – Old Growth Management Area

OSPR – Operational Site Planning Regulation

R/S – Result/Strategy

RLUP – Regional Land Use Plan

RMA – Riparian Management Area

RMZ – Riparian Management Zone

RPF – Registered Professional Forester

RRZ – Riparian Reserve Zone

rVQC – recommended Visual Quality Class

SBFEP – Small Business Forest Enterprise Program (now BCTS)

SIFD – South Island Forest District

SMZ – Special Management Zone

SSE – South - South East

SU – Standard Unit

TAUP – Total Area Under Plan/Prescription

TFL – Tree Farm Licence

THLB – Timber Harvesting Land Base

TL – Timber License

TSA – Timber Supply Area

TSR – Timber Supply Review

UWR – Ungulate Winter Range

VFR – Vancouver Forest Region

VIHLP Order – Vancouver Island Higher Level Plan Order

VILUP – Vancouver Island Land Use Plan

VLI – Visual Landscape Inventory

VSC – Visual Sensitivity Class

VR – Variable Retention

WCB – Workers Compensation Board

WHA – Wildlife Habitat Area

WS – Well Spaced

WSW – West - South West

WTP – Wildlife Tree Patch

WTR – Wildlife Tree Retention

BC Timber Sales, Strait of Georgia Business Area
Forest Stewardship Plan
South Island Forest District - West Coast

FDU # 1
Map 1 of 6

FDU #1

BARKLEY SOUND

IMPERIAL EAGLE CHANNEL

TREVOR CHANNEL

PACIFIC OCEAN

Proposed FDU
LU Boundary
Area excluded from FSP
Woodlots
Indian Reserve
Private Land
Tree Farm Licence
Timber License

Lake, River
Ocean
River, Stream

Road Subject to Permit
Existing Road Not Subject to Permit
Section 196(1)b FRPA Road
Section 196(2) FRPA Road
Bridge

Old Growth Management Area (Draft) *
Ungulate Winter Range
Park or Protected Area
Community Watershed
Fisheries Sensitive Watershed
RMZ - Enhanced
RMZ - Special
Recreation Reserve
Scenic Corridor

Subject to Cutting Permit/Timber Sale Licence
Section 196(1)a FRPA Area
Section 196(2) FRPA Area

BCTS - BC Timber Sales
CFP - Coulson Forest Products Ltd
EFP - Equa Forest Products
EPFR - Echo Pen Forest Resources Ltd
IFP - International Forest Products Ltd

* For purposes of establishing Section 6 of Order Establishing Provincial Non-spatial Old Growth Objectives

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Kilometers
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Projection: BC Albers
Base Datum: NAD83

BCTS
BC Timber Sales
Strait of Georgia

BC Timber Sales: Strait of Georgia Business Area
Forest Stewardship Plan
South Island Forest District - West Coast

FDU # 2
Map 2 of 6

Proposed FDU
LU Boundary
Area excluded from FSP
Woodlots
Indian Reserves
Private Land
Tree Farm Licence
Timber Licence

Lake, River
Ocean
River, Stream

Road Subject to Permit
Existing Road Not Subject to Permit
Section 196(1)b FRPA Road
Section 196(2) FRPA Road
Bridge

Old Growth Managment Area (Draft) *
Ungulate Winter Range
Parks or Protected Area
Community Watershed
Fisheries Sensitive Watershed
RMZ - Enhanced
RMZ - Special
Recreation Reserve
Scenic Corridor

Subject to Cutting Permit/Timber Sale Licence
Section 196(1)a FRPA Area
Section 196(2) FRPA Area

BCTS - BC Timber Sales
CFP - Coulson Forest Products Ltd.
EFP - Fount Forest Products
EFPR - Echo Pen Forest Resources Ltd.
IFP - International Forest Products Ltd.

* For purposes of establishing Section 6 of Order Establishing Provincial Non-spatial Old Growth Objectives

DRAFT

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Projection: BC Albers
Base Datum: NAD83

FDU #4

FDU #3

FDU #2

BC Timber Sales, Strait of Georgia Business Area
Forest Stewardship Plan
South Island Forest District - West Coast

FDU # 3
Map 3 of 6

DRAFT

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BCTS

BC Timber Sales

BC Timber Sales: Strait of Georgia Business Area
Forest Stewardship Plan
South Island Forest District - West Coast

FDU # 4
Map 4 of 6

FDU #3

FDU #4

FDU #5

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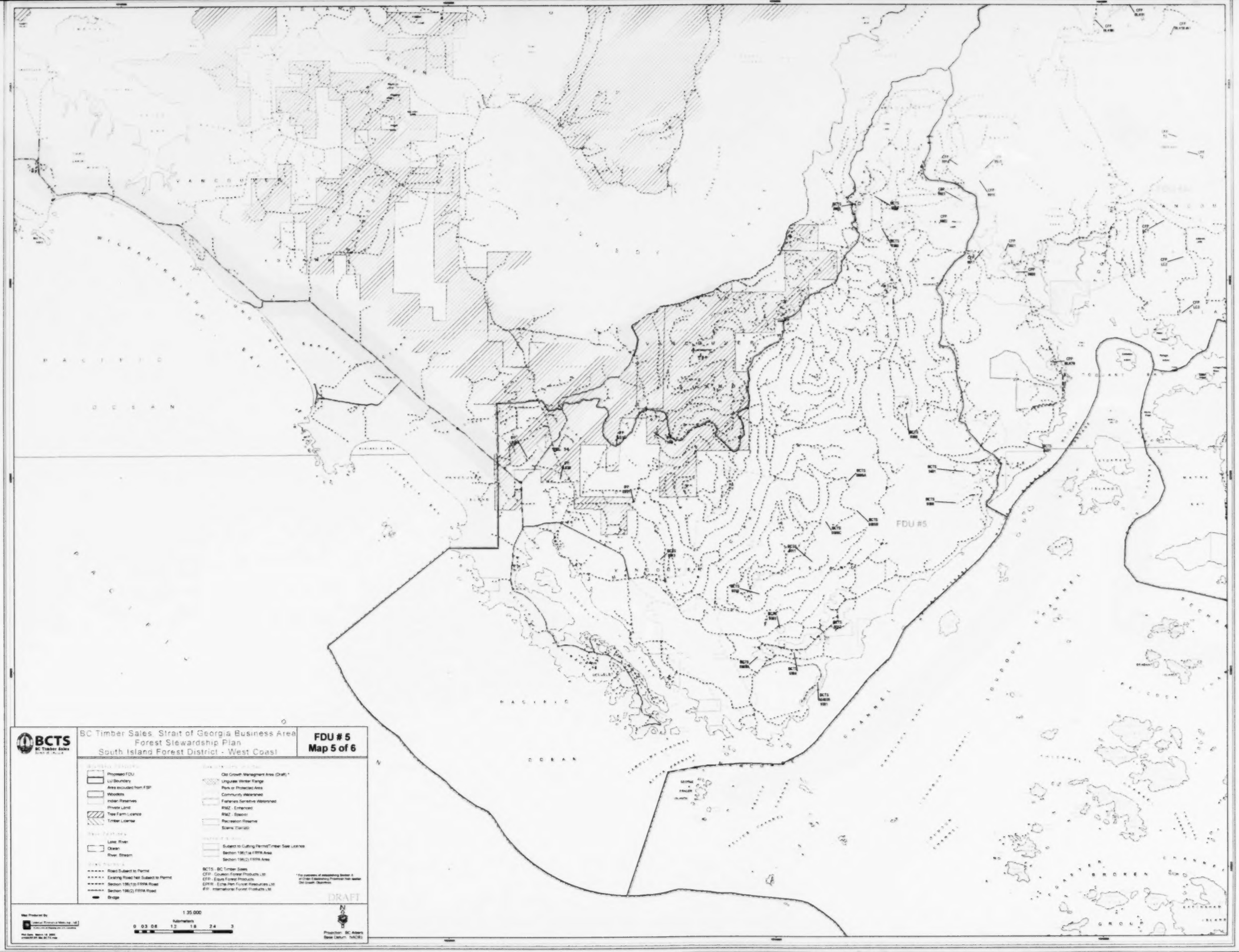

BCTS
BC Timber Sales

BC Timber Sales, Strait of Georgia Business Area
Forest Stewardship Plan
South Island Forest District - West Coast

FDU # 5
Map 5 of 6

- Proposed FDU
- LU Boundary
- Area excluded from FSP
- Woodlots
- Indian Reserves
- Private Land
- Tree Farm Licence
- Timber License
- Lake, River
- Ocean
- River, Stream
- Road Subject to Permit
- Existing Road Not Subject to Permit
- Section 195(1)b FRPA Road
- Section 196(2) FRPA Road
- Bridge
- Old Growth Managment Area (Draft) *
- Ungulate Winter Range
- Park or Protected Area
- Community Watershed
- Fisheries Sensitive Watershed
- RMZ - Enhanced
- RMZ - Basic
- Recreation Reserve
- Scenic (Partial)
- Subject to Cutting Permit/Timber Sale Licence
- Section 195(1)a FRPA Area
- Section 196(2) FRPA Area

BCTS - BC Timber Sales
CFP - Coulson Forest Products Ltd
EFP - Equis Forest Products
EPFR - Echo Pen Forest Resources Ltd
IFP - International Forest Products Ltd

* For overview of establishing Section 6 of Order 5 Establishing Provincial Non-spatial Old Growth Objectives

DRAFT

Map Produced By:

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Kilometers
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Projection: BC Albers
Base Datum: NAD83

BCTS
BC Timber Sales

BC Timber Sales, Strait of Georgia Business Area
Forest Stewardship Plan
South Island Forest District - West Coast

FDU # 6
Map 6 of 6

Proposed FDU
LU Boundary
Area excluded from FSP
Woodlots
Indian Reserves
Private Land
Tree Farm Licence
Timber Licences

Lake, River
Ocean
River, Stream

Road Subject to Permit
Existing Road Not Subject to Permit
Section 18(1)(a) FRPA Road
Section 18(2) FRPA Road
Bridge

Old Growth Management Area (OGMA) *
Ungulate Winter Range
Park or Protected Area
Community Watershed
Fisheries Sensitive Watershed
RMZ - Enhanced
RMZ - Special
Recreation Reserve
Scenic Corridor

Subject to Cutting Permit/Timber Sale Licence
Section 196(1)a FRPA Area
Section 196(2) FRPA Area

BCTS - BC Timber Sales
COF - Coulson Forest Products Ltd
EFP - Edgar Forest Products
ERR - Echo Pier Forest Resources Ltd
IFP - International Forest Products Ltd

* For purposes of establishing Section 9 of Order Establishing Provincial Non-spatial Old Growth Objectives

DRAFT

Map Produced By:

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Projection: BC Albers
Base Datum: NAD83

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